REPORT 1998

Environmental Commissioner of Ontario

OPEN DOORS

Ontario's *Environmental Bill of Rights*

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Environmental
Commissioner
of Ontario

Commissaire à
l'environnement
de l'Ontario

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LL.B., LL.M.
Commissioner

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LL.B., LL.M.
Commissaire

April 1999

The Honourable Chris Stockwell
Speaker of the Legislative Assembly
Room 180, Legislative Building
Legislative Assembly
Province of Ontario
Queen's Park

Dear Mr. Speaker:

In accordance with section 58 of the *Environmental Bill of Rights*, 1993, I am pleased to present the 1998 annual report of the Environmental Commissioner of Ontario for your submission to the Legislative Assembly of Ontario.

Sincerely,

Eva Ligeti

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Environmental Commissioner of Ontario

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Open Doors 1998

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A Message from the Environmental Commissioner of Ontario

It's Time to Listen to the People

My 1998 Report to the Legislative Assembly documents the decline of Ontario's capacity to protect the environment. The Ontario government has redefined its role in relation to environmental protection, and this has directly affected the ministries responsible for implementing the *Environmental Bill of Rights (EBR)*.

The principles incorporated by many ministries into their Statements of Environmental Values have lacked adequate attention and resources to fulfil them. Examples include the Ministry of Health's promise to support the elimination of the carcinogens and toxics implicated in the environmental causes of cancer; the commitment of Management Board Secretariat to prepare environmental reports and consult with the public prior to selling environmentally significant public lands; and the promise of the Ministry of Transportation to seek to reduce transportation related air emissions.

Evidence of the deterioration of the province's environmental protection standards is widespread. The Ministry of Natural Resources' much reduced staffing and its reliance on industry self-monitoring raised questions about the ministry's capacity to protect the province's natural resources effectively. The Ministry of Municipal Affairs and Housing and the Ministry of Transportation have provided little support for environmentally sustainable land use and transportation strategies. Environmental initiatives of the Ministry of the Environment, which have been highly touted by the Ontario government, are unlikely to deliver the level of protection promised. While the Drive Clean program is a step in the right direction, it will not deliver more than minimal

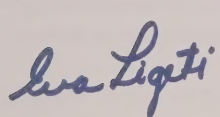
benefits — and the implementation of the rest of the Smog Plan languishes. The ministry is retreating from enforcement of effluent limits and is making little progress on applying pollution prevention to hazardous wastes. It has promised to update 70 provincial air quality standards, but in two years, has produced only nine guidelines and no new enforceable standards.

Less government in this case means less enforcement and less environmental protection. In order to maintain the semblance of environmental protection, ministry officials have resorted to describing the "co-benefits" of existing programs, attempting to involve industry in voluntary measures and transferring responsibility for environmental decisions to municipalities. The ministries have yet to produce credible information to demonstrate that these strategies are adequate to deal with existing environmental problems or that they will be properly monitored.

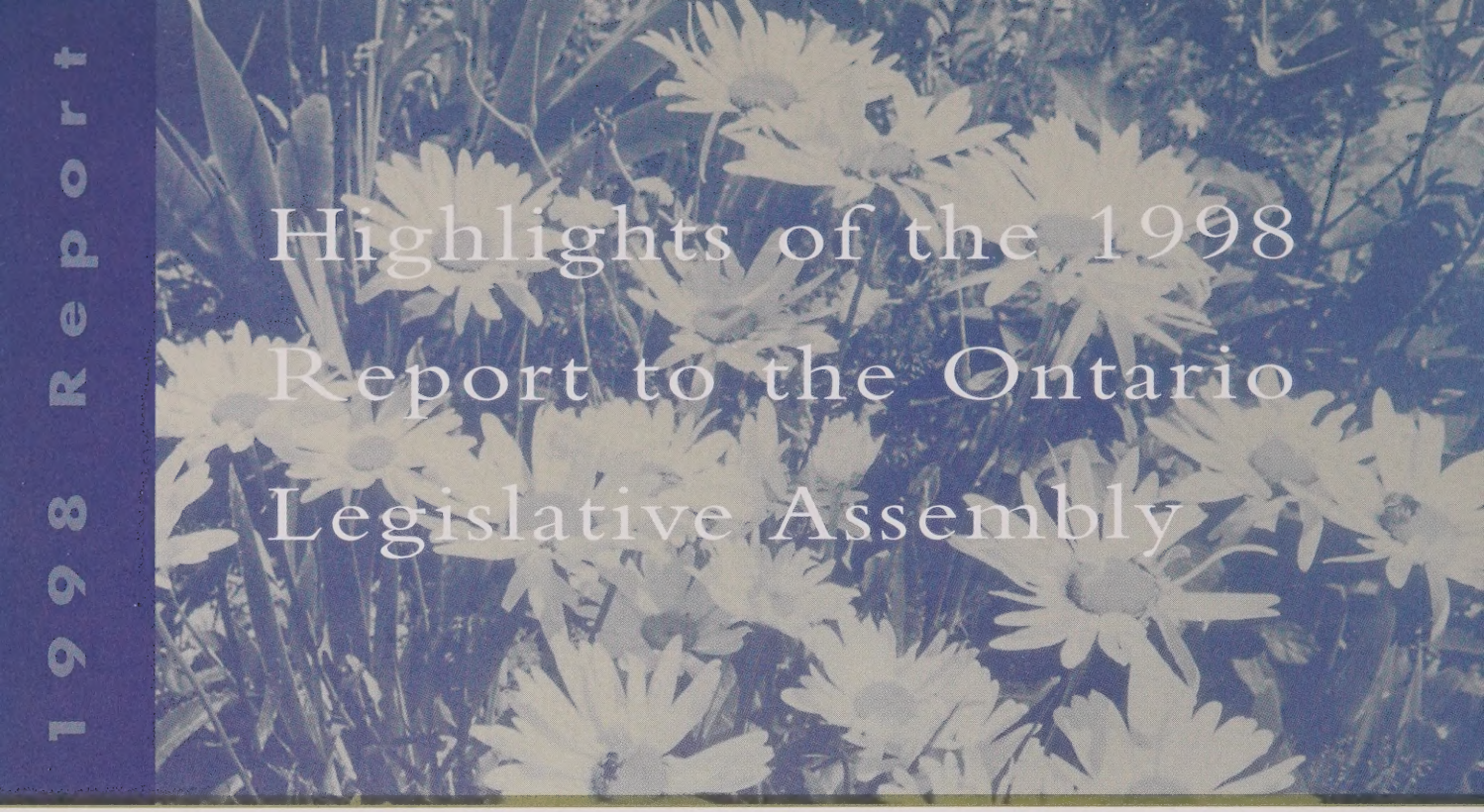
Ministry staff now routinely comply with most required *EBR* procedures. However, on occasion, even basic procedural requirements have been inexplicably ignored. When the Minister of the Environment created new forms of penalties for polluters in Bill 82, he failed to respect the public's right to the minimum 30-day comment period on the proposal, and instead allowed a mere 10 days for public comment. After three years, the Ministry of Natural Resources has still not created a classification regulation so that the public can fully use their rights under the *EBR*.

In the five years since its proclamation, the *Environmental Bill of Rights* has become an avenue for Ontario residents to pursue the goals of environmental protection and to hold the Ontario government accountable for environmentally significant decisions. Ministries often do make changes when members of the public, through their comments, identify specific ways of making proposals more environmentally favourable. After members of the public submitted an *EBR* request for investigation, MNR officials confirmed incidences of illegal logging practices in the Algoma Highlands. The *EBR*'s processes *do* work to protect the environment.

During 1998, the public has used the *EBR* to attempt to slow the decline of environmental health and protection in Ontario. However, as my 1998 Report demonstrates, the province has yet to use the wide array of tools available to achieve environmental goals. The Ontario government needs to assess the full environmental and health costs of its policies, set firm environmental targets, and give the public the comprehensive and clear information needed to determine whether the environment is being properly protected.



Eva Ligeti
Environmental Commissioner of Ontario



Highlights of the 1998 Report to the Ontario Legislative Assembly

Ministry of Energy, Science and Technology: SEV Commitments to Promote Research into Environmental Sciences

Pg. 31

In its new Statement of Environmental Values, the Ministry of Energy, Science and Technology has indicated that it wants to fund research into environmental science and technology. So far, the ministry's Ontario Research and Development Challenge Fund has invested in 31 projects, none of which were for environmental research, and given the structure of the Fund, few are likely to be undertaken in the future.

Ministry Business Plans

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Ministry Business Plans are posted on the Environmental Registry for a 60-day comment period each year. As part of the 1999-2000 business planning process, each *EBR* ministry has been asked by the Management Board Secretariat to describe its strategy for honouring its SEV. Members of the public can use this opportunity to comment on ministry Business Plans to suggest how ministries should improve their commitments to environmental health.

Ontario's Progress on Climate Change

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A key method of controlling the greenhouse gases (GHGs) responsible for climate change is to improve energy efficiency. Numerous Ontario ministries have made commitments to energy efficiency and conservation in their Statements of Environmental Values, and several 1998 Registry postings were connected to this issue, in particular, the *Energy Competition Act*, administered by the Ministry of Energy, Science and Technology. The Ontario government's primary response to the problem of climate change is participation in the National Process on Climate Change. Other than that, Ontario is relying on existing programs, notably the Smog Plan and the Drive Clean program, as its contributions to combatting climate change. This review of Ontario's progress on climate change has found that provincial ministries have not done the analyses necessary to support their assumptions about the ability of their programs to deliver reductions in greenhouse gases. The ECO also found that ministries do not have plans for consulting the public and that only limited staff resources have been assigned to the problems of climate change.

The ECO also looked at approaches to reducing GHG emissions that are within the jurisdiction of Ontario ministries. These approaches include opening the electricity grid to competition, emissions trading, feebates, alternate sources of energy, building code standards, energy efficiency standards and carbon taxes. We looked at the current status of these approaches in Ontario and asked whether they could be used effectively to combat greenhouse gases.

Drive Clean

Pg. 45

The Ministry of the Environment's Drive Clean program has been much publicized by the Ontario government, even though it is substantially behind its start-up date. The ECO's review suggests that this program will contribute to reducing only a small amount of the smog-causing agents emitted by vehicles. But Drive Clean will be effective in reducing even that small amount only if identified weaknesses in the program are corrected. Other parts of this report, including Urban Sustainability and Climate Change, show that Ontario ministries need to carry out much more than a Drive Clean program to ensure that vehicle emissions do not continue to pose a major threat to the health of Ontario residents and that their contribution to Ontario's greenhouse gas emissions are effectively controlled.

Urban Sustainability

Pg. 84

The ECO's review of urban sustainability highlights the interconnectedness of environmental policy. This is one of the central themes of the *EBR*: that environmental outcomes are determined by decisions made across a broad range of ministries. The ECO looked especially at the policies and priorities of the Ministry of Municipal Affairs and Housing and the Ministry of Transportation regarding land use planning and public transportation — and at the connection these ministries should have with the efforts of the Ministry of the Environment to control vehicle emissions. The ECO found that the Ontario government does not have mechanisms in place to

ensure that land use policies that protect the province's environment are being applied. Similarly, the ECO could find no provincial ministry that would accept responsibility for ensuring that Ontario municipalities have the resources, the administrative framework, and the capabilities to plan for local, regional or province-wide public transit.

The ECO's review also looked at some of the economic tools that could be used to deal with Ontario's urban development and transportation problems, and at the role provincial ministries could play to accomplish better land use through the use of development charges and brownfield redevelopment.

Waste Reduction and Product Stewardship Pg. 107

Product stewardship is a way of ensuring that the producers and consumers of products assume responsibility for the wastes generated when products have reached the end of their useful life. In contrast, Ontario's approach allows consumers to rely on their municipal governments, supported through taxes, to dispose of most of these wastes.

The ECO looked at what other jurisdictions are doing to promote product stewardship. The research shows that in many cases, most notably in the comparison of provincial beverage container stewardship programs, Ontario fares worse than almost every other province in Canada. The Blue Box system, which was innovative when first introduced, is now facing serious problems. It costs municipalities $46 million more per year than it generates in revenue'.

Lands for Life Pg. 122

Lands for Life was the Ministry of Natural Resources' strategy for involving citizens in planning for the protection and use of publicly owned land and resources — including forests, wildlife and minerals — in a 46-million-hectare area of central and northern Ontario. This attempt to involve the public ultimately proved to be unsatisfactory because of shifting and unclear processes, goals, timelines and expectations. While the ECO's review highlights problems with the public participation process, by the end of 1998, no final outcome for Lands for Life had been announced by the minister.

Review of New Laws and Regulations Pg. 140

In 1998, the pace of change to environmental laws was slower than during the last three years. The most noteworthy legislation this year was the law creating a competitive market for the generation and sale of electricity in Ontario, ending the monopoly of Ontario Hydro. The ECO reviewed these and other legal reforms. In one case, Bill 82, MOE failed to comply with the *EBR* when it shortened the required 30-day comment period to a mere 10 days.

Ministry of the Environment — Regulatory Reform: Better, Stronger, Clearer? Pg. 148

MOE's thorough review of its own regulations is a missed opportunity to improve Ontario's environmental protection standards by making them stronger, as well as simply making them clearer.

Standardized Approval Regulations Pg. 157

To reduce "red tape" and to lessen its workload, MOE is introducing a new system of approvals for certain kinds of activities that the ministry has declared to be less environmentally risky.

Unposted Decisions Pg. 160

Over the past two years, the number of times ministries failed to post environmentally significant decisions on the Environment Registry for public comment has continued to decline.

Reviews and Investigations Pg. 162

Members of the public can use the *EBR*'s application process to urge ministry action they believe is needed to protect the environment.

Hazardous Waste Management in Ontario **Pg. 170**

Hazardous wastes are those wastes that have been determined to carry the greatest risk of harm to the environment and to human health. Current rules governing hazardous wastes in Ontario focus on minimizing their damaging effects. In contrast, MOE's SEV states that the ministry will place first priority on preventing pollution. MOE has not made good on its SEV commitment to pollution prevention, and has instead indicated that it hopes to achieve pollution prevention through voluntary initiatives the ministry is promoting to industry. A recent application for review under the *EBR* raised many serious questions about MOE's hazardous waste management rules. MOE has not adequately replied to many of the issues raised. The ECO review found that improved databases and better public reporting are needed to determine if MOE's chosen strategies to contain hazardous waste are succeeding.

Recycling Pulp and Paper Mill Wastes **Pg. 179**

The ECO regularly hears from members of the public who are concerned about the harmful effects of recycled pulp and paper mill wastes. In most cases, "recycling" of these wastes entails some form of release into soils, water or air. Better scientific studies are needed to ensure that public health and the environment are adequately protected from the contaminants contained in recycled pulp and paper mill wastes. The rules governing the recycling of pulp and paper mill wastes need to be clarified.

Forest Harvesting Practices: Results of an MNR Investigation **Pg. 185**

An environmental group checked whether forestry companies had followed Ministry of Natural Resources rules for harvesting forests on public land. Based on their findings they submitted applications for investigation under the *EBR*. MNR's subsequent investigation led to enforcement action against the companies. This investigation also highlighted some problems with the laws protecting Ontario's forests. It revealed several further contraventions of the *Public Lands Act* and the *Crown Forest Sustainability Act* that could not be enforced because the limitation periods had expired, a particularly serious matter in view of MNR's much reduced staffing and its reliance on industry self-monitoring. Also, the highly skilled MNR staff found it difficult to apply the ministry's new approach to compliance, which raised questions about MNR's capacity to protect the provinces' natural resources effectively.

Instruments **Pg. 190**

An application by the Nova Group to take water from Lake Superior and export it to Asia as drinking water illustrates how important the public's right to notice of individual instruments is for protecting the environment of Ontario.

Other Legal Rights **Pg. 200**

Members of the public have begun to use several of the other legal rights made available to them by the EBR. They are using these rights to fight a water taking permit for a quarry and to challenge an approval for spreading paper sludge on agricultural land. A group of small businesses has sought to appeal an approval for a waste transfer station. In one case, a leave to appeal a landfill site approval was granted in 1998. In another case, members of the public are using the right to sue for public nuisance and an action to sue for harm to a public resource.

Slow Progress on Developing Air Standards **Pg. 211**

Although MOE publicized its plan to update air standards as an aggressive approach to protecting Ontario's environment, the ECO review of MOE's actions showed the ministry's progress to be feeble. The ministry said it would update the standards for 70 pollutants over three years, when, in fact, it took MOE approximately two years to finalize the rules pertaining to only nine pollutants. Even for those few pollutants, MOE merely created guidelines rather than directly enforceable standards.

The *Environmental Bill of Rights*

Protecting the rights of the people of Ontario to a healthful environment is a fundamental goal of the *Environmental Bill of Rights (EBR)*. The *EBR* pursues that goal by giving the people of Ontario the right to become involved in decisions that affect the environment, and by bringing accountability and transparency to ministry decision-making. The *EBR* thus helps to ensure that government decisions reflect the environmental values common to all Ontarians, those of protecting, conserving and restoring the natural environment of this province.

Members of the public use their rights under the *EBR* when they comment on ministry proposals that appear on the Environmental Registry, and when they request actions by a minister to protect the environment. As Environmental Commissioner of Ontario (ECO), I undertake careful reviews each year of how ministries handle the comments and requests that come from the public. These reviews of ministry compliance with the *EBR* form an important part of my Report to the Ontario Legislature.

The Ministry Statement of Environmental Values

As one of the first steps in implementing the *Environmental Bill of Rights*, each ministry prescribed under the *EBR* prepares a Statement of Environmental Values (SEV) that must be considered whenever an environmentally significant decision is made in the ministry. Each SEV contains an unequivocal commitment by the minister that the purposes of the *EBR* will be applied to the decisions made by the ministry. Thus, consideration of the ministry's Statement of Environmental Values plays a key role in my evaluation of the decisions made in each ministry during the year.

In this 1998 Report, I and my staff continue the ECO's ongoing review of the commitments made by provincial ministries in their Statements of Environmental Values, asking how and whether these commitments have been translated into the ministry decisions and policies that affect the environment.

THE ENVIRONMENTAL REGISTRY

What is it?

The Environmental Registry is an Internet Web site < www.ene.gov.on.ca/envision/ebr > that provides the public with electronic access to environmentally significant proposals and decisions, appeals of instruments, court actions, and other information related to ministry environmental decision-making. Ministries have to post this information on the Registry so that the public is able to provide input on proposals before ministries make final decisions on them. (For more information, see Appendix A.)

MINISTRIES PRESCRIBED BY THE *ENVIRONMENTAL BILL OF RIGHTS*

- Agriculture, Food and Rural Affairs (OMAFRA)
- Citizenship, Culture and Recreation (MCzCR)
- Consumer and Commercial Relations (MCCR)
- Economic Development, Trade and Tourism (MEDTT)
- Energy, Science and Technology (MEST)
- Environment (MOE)
- Health (MOH)
- Labour (MOL)
- Management Board Secretariat (MBS)
- Municipal Affairs and Housing (MMAH)
- Natural Resources (MNR)
- Northern Development and Mines (MNDM)
- Transportation (MTO)

The Ministry of Health: SEV Commitments and Environmental Health

The Statement of Environmental Values of the Ministry of Health makes specific statements that the ministry will support the elimination of the environmental causes of cancer, encourage hospitals to be environmentally responsible, and work to ensure a safe, high quality physical environment. The ECO's review of MOH's SEV shows that the ministry has devoted few resources to these commitments and has made little effort to help ensure that practical measures are taken to protect the public from the effects of environmental hazards.

In its Statement of Environmental Values, the Ministry of Health stated a general goal: *"to ensure a safe, high-quality physical environment."* Since *"environmental contaminants and other hazards do exist,"* the SEV continues, *" . . . the ministry has a responsibility to help ensure appropriate and practical measures are taken to protect the public from their effects."*

Environmental causes of cancer

Cancer is the leading cause of premature death of Ontarians. In fact, Cancer Care Ontario estimated that in 1998, 45,000 Ontarians would develop cancer and 23,000 would die of the disease. Many cancers develop because of lifestyle choices like smoking. MOH is taking action to reduce smoking and other lifestyle risks. However, research canvassed by the Ontario Task Force on the Primary Prevention of Cancer indicates there are substantial links between cancer and exposure to environmental toxins.

One of the objectives in MOH's SEV is to *"move to effective prevention and promotion activities in the control of cancer and support the elimination of pollutants and carcinogens as causative agents."* MOH says that it is involved in cancer care, prevention and research, including funding epidemiological research conducted by universities. However, the ministry has not clarified what resources it is devoting specifically to investigating the environmental causes of the disease or to supporting the elimination of pollutants and carcinogens as causative agents. The ECO was able to identify only one MOH office directly concerned with the issue, the Environmental Health and Toxicology Unit. With a staff of two, this unit reviews the scientific basis of actions which limit or prevent exposure to chemicals from technological or industrial sources, as well as chemicals suspected of causing adverse health effects, including carcinogens. The unit

does not monitor environmental carcinogens in Ontario or their impact on human health, nor does it have a regulatory role. In spite of the ministry's SEV commitment, MOH indicates that the Ministry of the Environment has the legislative authority and monitoring expertise to set standards for pollution. MOH says that its staff provide medical and epidemiological advice to MOE and to Health Canada's Health Protection Branch.

Environmentally responsible behaviour at hospitals

MOH's SEV states that the ministry will encourage hospitals and other health transfer agencies *"to practise environmentally responsible behaviour."* However, in the ECO's review of ministry programs and policies, it became clear that MOH has not demonstrated leadership with regard to two environmentally significant issues.

Mercury phase-out

Mercury is contained in some hospital equipment, dental amalgams, lab chemicals and pharmaceuticals. Although mercury is a toxic substance that is highly persistent in the environment, these products are disposed of through landfilling or incineration. Working together, Environment Canada, the Ministry of the Environment and Pollution Probe have initiated a program which encourages hospitals to eliminate mercury use. Six hospitals have agreed to a Memorandum of Understanding on mercury reduction or elimination. MOH staff were informed of this initiative, but they did not return the calls of MOE staff.

Biomedical waste incinerators

Most of Ontario's biomedical waste is incinerated, some of it outside Ontario and some directly by hospitals within Ontario. The incineration of biomedical waste produces emissions of heavy metals, dioxins, furans, and common air pollutants like particulate matter and carbon dioxide. But a regulation made under the *Environmental Protection Act (EPA)* exempts hospital incinerators built before 1986 from section 27 of the *EPA*, which requires certificates of approval for operating waste management systems. Thus, today almost all Ontario hospital incinerators operate without air pollution control equipment. (A 1991 report by the Ministry of the Environment found that only one of the 106 hospital incinerators operating at the time had air pollution control systems.) According to MOE, there are 59 operating hospital incinerators in Ontario, none of which have had air pollution control systems installed.

In 1992, the Ministry of the Environment produced a strategy for replacing and upgrading biomedical waste management facilities, with the intention of closing all pre-1986 facilities once the replacement program was completed. MOH supported the strategy, and had two staff dedicated to the area. Between 1992 and 1995, the strategy was shelved due to cost concerns. MOH looks to hospitals to address and fund infrastructure needs from their own resources. MOH says that ministry capital funding of up to 50 per cent is available to address growth-related pressures and gaps in health services and restructuring, but not for upgrades or replacement of incinerators.

Monitoring or improving environmental health in Ontario communities

The ministry's SEV states that one of MOH's goals is *"to advise and monitor through surveillance and investigation (local boards of health) existing and potential health hazards posed by environmental contamination."* The goal of the ministry's new Health Programs and Services Guidelines is a community with a "health-supporting environment in which people will be protected from adverse health consequences of exposure to toxic, hazardous substances and conditions in homes, public places and the workplace."

These new Guidelines, released in January 1998, do include objectives related to environmental health. The Guidelines set the general standard for health hazard investigation and mandate local public health departments to take action to address environmental risks. For example, health units are directed to monitor drinking water quality and sample water at bathing beaches. However, several boards of health had recommended that MOH include a broader Healthy Environment Program Standard in the Guidelines, but MOH declined to do so.

In January 1998, as part of reforms to municipal program financing, the government made municipalities fully responsible for funding local boards of health. Previously, the province had paid 75 per cent of the cost of public health programs. Municipalities are still obligated to provide funding for mandatory health programs, but in the future, local boards of health, now supported exclusively by local tax dollars, are unlikely to find the funds to address more than the minimum mandated environmental health issues. MOH has told the ECO that the ministry is currently preparing a provincial health status report, which it indicates will include monitoring of the environmental health issues which current public health programs address.

Action on smog and air pollution

The Ministry of the Environment estimates that each year in Ontario approximately 1,800 premature mortalities, 64,000 hospital emergency room visits, and 1,400 hospital visits can be attributed to the effects of smog.

By stating in its SEV that it will ensure a "*safe, high-quality physical environment*" and that it will "*advise and monitor . . . health hazards posed by environmental contaminants*," MOH has suggested it has a role to play in addressing air pollution. But when MOH was invited to participate in developing Ontario's Smog Plan (released by MOE in early 1998), the ministry declined a position on the committee preparing the Plan. MOH reviewed some of the smog assessment documents prepared by MOE, and commented on two documents. While the Ontario Medical Association has published a position paper on the impact of smog on public health and called for greater government action to reduce air pollution, the ECO was not able to identify any MOH position statements on air quality issues.

MOH's Environmental Health and Toxicology Unit did develop a smog health effects matrix. My staff were told that the unit also distributes information to local health units on the health impacts of air pollution.

"Greening" the ministry's internal operations

The Ministry of Health's SEV states that it is *"committed to environmentally sound policies and practices and will support and promote the corporate greening of its programs, practices and activities of all its employees."* In addition, the SEV states that *"the ministry will address the conservation measures of water, energy, waste minimization and waste management."* The ministry's Environmental Protection Program policy, developed in 1992, includes an environmental code of practice for ministry employees.

MOH staff, however, were unable to explain the contents of the "environmental code of practice" nor make a copy available to the ECO until just before this report was finalized. MOH's 1997-1998 and 1998-1999 Business Plans make no mention of conservation measures within the ministry.

Although MOH's SEV says there is an annual report that describes MOH's progress on greening ministry operations, MOH did not provide the ECO with copies of recent reports, as requested.

Recommendation 1

In order to meet its SEV commitments, MOH should:

- **participate in reviewing and commenting on MOE's standard-setting activites for environmental contamination;**
- **actively provide its expertise and contact networks to support MOE on environmental projects;**
- **upgrade or phase out polluting hospital incinerators.**

Management Board Secretariat: SEV Commitments and Ontario's Real Estate Properties

Through its agency, the Ontario Realty Corporation, MBS manages Ontario's public property holdings. MBS has not followed requirements for environmental assessment of environmentally significant lands and the public has not had access to the records promised in the SEV, nor the opportunities to comment on government plans to sell properties. MBS has committed to review and improve current practices in a number of areas as a result of this ECO review.

As a central agency of the provincial government, Management Board Secretariat is responsible for Ontario's substantial public property holdings. This includes responsibility for all government real estate activities, such as land development, site cleanup, and the purchase and sale of government lands.

In its Statement of Environmental Values, Management Board Secretariat says that among its responsibilities, these "*real estate activities have the greatest potential for impact on the natural environment*," and must thus adhere to the requirements of the MBS Class Environmental Assessment. (A "Class EA" sets out a process to be followed by ministries in order to assess and mitigate the environmental impacts of a certain "class" of ministry activities.) The MBS Class EA requires site-specific research and public consultation on all real estate activities, with the results available to the public upon request. It is through its Class EA, the MBS SEV states, that Management Board Secretariat fulfils the purposes of the *Environmental Bill of Rights*.

In its SEV, MBS also commits to ensuring that the purposes of the *EBR* are integrated into the decision-making on new Management Board Directives or the updating of existing Directives for the Ontario Public Service. In its *EBR* Procedures Manual, MBS also says that any new policies or revisions to existing policies regarding real estate are directly subject to the requirements of the *Environmental Bill of Rights*, including considering posting proposals on the Environmental Registry for public comment.

Have MBS's SEV commitments been integrated into policy decisions?

The Management Board Secretariat says that none of the policy decisions it has made about government real estate holdings during the past three years has been environmentally significant. In practice, this has meant that these policies have not been posted to the Environmental Registry for public scrutiny. However, many of the policies MBS has developed during this time could indeed be considered environmentally significant.

Decision to accelerate disposal of surplus government lands

In late 1995, the government decided to increase sales of provincially owned lands, and MBS set a target of selling $60 million worth of surplus government lands in both 1996-1997 and 1997-1998, and then exceeded those targets, selling $80 million worth of government lands in 1997-1998. MBS's latest Business Plan, released in June 1998, raised the target to $120 million in sales of surplus lands in 1998-1999. The revenue target for 1999-2000 has recently been established at $200 million. Some of these decisions should have been posted on the Environmental Registry. MBS maintains that the establishment of sales projections is not of itself environmentally significant. But nevertheless, in response to my concerns, MBS has now committed to post the ORC's annual Corporate Plan, including a marketing plan highlighting the properties it plans to market for sale, on the Environmental Registry as an information notice. I urge the ministry to ensure that the information notice informs the public how they can comment on the ministry's plans and how they can be involved in the Class EA process for each individual sale.

Transfer of responsibility to independent agency

MBS transferred responsibility for realty activities to its agency, the Ontario Realty Corporation (ORC), in 1993, and from late 1995 through 1998 began to restructure the agency to operate more independently from the government. MBS recently informed me that it will not proceed with some aspects of the planned restructuring. But ORC, which had about 1,000 staff in 1995, is expected to have only 175 staff by 1999. Thereafter, most realty activities will be undertaken on contract by the private sector.

ORC has recently issued a Request for Proposal to contract out its land management services for most of the government's real estate portfolio, including 60,000 acres of land owned by MBS. ORC expects to transfer its responsibilities by mid-1999 to the private sector, as part of its alternative service delivery plan. MBS notes that ORC is expected to retain close control of all these activities. A Memorandum of Understanding (MOU) between ORC and Management Board of Cabinet was approved in March 1998. The MOU requires ORC to comply with the *Planning Act* and the *Environmental Assessment Act*. MBS has told the ECO that it will ensure that its commitments and responsibilities under the *EBR*, as well as those of ORC, are reflected when the MOU is reviewed. The MOU requires an annual Realty Services Management Agreement, setting out in more detail MBS's expectations of ORC. It will include operational roles and responsibilities, delegations of authority, performance measurement, reporting and other matters. MBS has committed to incorporating some environmental responsibilities in the Realty Services Management Agreement, and will provide the agreement to the ECO when it is finalized.

In 1998 MBS updated its Guidelines to Implementing a Change in Service Delivery to give very clear instructions to all ministries subject to the *EBR*: alternative service delivery plans are "policies" under the *EBR*. The Guideline says that ministries subject to the *EBR* must determine the environmental impact of alternative service delivery plans, consider the ministry's SEV when drafting the plan, and fulfil legal public consultation requirements on specific alternative service delivery plans. It also says that where the government sets pol-

icy and makes decisions for services that may be contracted out to the private sector, the *EBR* may continue to apply to these services and environmental factors should be considered in decision-making.

I urge MBS to apply these Guidelines for changes in service delivery to its real estate activities, specifically the alternative service delivery plans of the ORC, and to clarify its alternative service delivery plans publicly.

Revision of MBS realty policy

MBS has recently revised its main policy on real estate activities, called the "Directive on Real Property and Accommodation," which applies to all government ministries and some agencies. Approved in September 1998, the revised directive reflects "fundamental changes in current practices." Some of the changes include inclusion of new principles, such as "value for money," to be achieved by "optimizing the use of the Government's real property" and "maximizing the return to the Crown when disposing of surplus assets"; requiring ministries to identify surplus lands annually; and requiring ORC to develop an annual plan for selling surplus lands. Changes also include removing references to compliance with Acts such as the *Environmental Assessment Act*, and setting out ORC's responsibilities as laid out in the new MOU. MBS says that removing the reference to the *Environmental Assessment Act* in no way reduces managers' need to be aware of, and comply with, the Act.

This policy revision should have been posted on the Environmental Registry for public comment before it was implemented. MBS maintains that the policy is administrative and not environmentally significant, but the ECO disagrees (see Appendix E). MBS has offered to post the revised policy on the Environmental Registry as an information notice, to inform the public that these changes have been made.

One of the main changes is to allow ORC to determine which government lands are surplus. ORC will develop an annual plan for the government's real estate portfolio, including disposal of surplus lands and property, which will be posted on the Environmental Registry as an information notice.

The directive calls for the development of new criteria and processes for determining which properties are surplus and should be sold, as well as operating procedures for acquiring, managing and disposing of real property across the province. These are currently being developed by interministry work groups, and are expected to be approved by the end of March 1999. While the directive states that MBS will consult with ministries and agencies on these matters, it doesn't mention consultation with the public. These criteria and processes are undoubtedly environmentally significant, since they will determine how $200 million worth of property will be declared surplus and sold in the 1999-2000 fiscal year, beginning April 1. The Ministry of Natural Resources posted its similar new criteria and procedures on the Registry for comment.

The *EBR* defines "policy" as a "program, plan or objective, and includes guidelines or criteria to be used in making decisions." I urged MBS to post these new proposed policies on the Environmental Registry for public review and comment, because they will be used by ministries and agencies, and perhaps the private sector in the future, in making important decisions about the fate of *public* lands. While MBS maintains that the

LAND SALES BY THE ONTARIO REALTY CORPORATION

In its Statement of Environmental Values, the Management Board Secretariat says that its "*real estate activities have the greatest potential for impact on the natural environment,*" and must thus adhere to the requirements of the MBS Class Environmental Assessment. The following examples of realty activities carried out by MBS's agent, the Ontario Realty Corporation, illustrate different ways ORC has dealt with the potential environmental impacts of the sale of government lands.

- A large tract of land in Maple was declared surplus when a Ministry of Natural Resources District Office and research station were put up for sale by ORC in 1996. The City of Vaughan and the Toronto and Region Conservation Authority opposed the sale and urged the province to ensure that the lands — 128 acres across from the Keele Valley Dump — remain in provincial ownership because they are important headwaters of the Don River watershed and contain other Environmentally Significant Area (ESA) features. The documentation records of ORC's environmental assessment (EA) stated that the proposed sale could cause local long-term changes, large enough to threaten the ESA, and that further implementation of the project should be halted until the EA and public consultation process were completed. ORC hired a consultant to do studies of contamination and site remediation, and effects of discontinuing MNR's groundwater pumping associated with its fish hatchery. ORC consulted with the conservation authority, Town of Vaughan, Region of York, Ministry of Natural Resources, the Don Watershed Regeneration Council and a local community group. After reportedly difficult negotiations, some of the lands will be protected by the town or conservation authority, and the rest will probably be developed.

- In February 1998, ORC recommended revisions to the final draft plan for Rouge Park North, which includes large areas of provincially owned land north of the City of Toronto. Although ORC says it is willing to donate $11-12 million worth of developable land to the park, in order to "reduce foregone revenue," ORC recommended changing the park's boundaries so that more residential properties in and around the park could be sold. ORC also recommended removing the requirement for conservation easements on the land it is selling.

- In 1993 the province set aside about 4,000 hectares as the York Durham Agricultural Preserve to serve as a green buffer on the edge of the Rouge Valley Park. But in 1997, the preserve, which forms part of the towns of Pickering and Markham, was put up for sale by ORC. The land is now referred to as an agricultural "assembly" rather than a preserve, and ORC has appealed the municipalities' decision to require easements, or restrictions, on the development that can take place on it. The issue of the kinds of controls that may be placed on the lots and the allowed sizes of the lots will be determined by the Ontario Municipal Board. ORC's records show that many of the individual land parcels contain ESAs, yet ORC decided not to carry out the required Environmental Study Report and public consultation. Some undevelopable valley lands will be transferred or sold to the Toronto and Region Conservation Authority. MBS says that ORC is currently negotiating with the Region and Pickering on a possible approach to resolve their differences about the use of easements.

identification of surplus properties is an administrative process, the ministry has agreed to post these criteria on the Environmental Registry for public review and comment.

Environmental assessment of realty activities

Our review suggests that Management Board Secretariat, through its agency, the Ontario Realty Corporation, has not followed some of the requirements of its Class Environmental Assessment, even though MBS says its Class EA forms the basis of the commitments made in its Statement of Environmental Values.

All sales of government lands fall under at least "Category B" status under the Class EA, which requires consultation with directly affected parties, a site analysis, and filing of a consultation and documentation record, which must then be available to the public. In addition, sales of lands involving environmentally significant areas (ESAs) to a non-conservation body are classified as "Category C" projects, requiring detailed Environmental Study Reports, including several stages of public notice and opportunities for public comment. The Class EA also requires MBS to submit an Annual Summary Report to the Ministry of the Environment each year on all of these activities.

ORC staff have prepared consultation and documentation records under Category B for sales of government lands, but have avoided doing the more detailed environmental studies and public consultation required under Category C for land sales involving environmentally significant areas, as defined in the Class EA. ORC has not classified any of its land sales as Category C since 1994.

ORC files and other material examined by the ECO suggest that several land sales in the past few years should have required Environmental Study Reports and a comprehensive public consultation program. A few ORC consultation and documentation records examined by the ECO identify ESAs, potential threats to them from the proposed sales, and the fact that the lands will be sold to a "non-conservation body." All of these conditions are triggers for Category C treatment. In several cases, ORC's own documentation records state that the project should be halted until the more stringent environmental assessment process in Category C is completed, but ORC has not undertaken that step.

MBS has told the ECO that ORC has consulted with selected agencies and affected parties, and in some cases, carried out Environmental Site Assessments. But this is not equivalent to the requirements of the Class EA for Category C. Category C projects require an Environmental Study Report describing the potential environmental impacts of the proposal, and plans to mitigate those impacts, as well as notice of the proposed land sale to affected property owners, agencies and the general public, in four stages of public consultation, including a 30-day public review period and opportunities to request a bump-up to a full environmental assessment of the project. MBS staff have indicated that they will follow up on ECO concerns about whether ORC has properly classified land sales and followed the Class EA requirements.

ORC's mandate is to sell government land which is identified as surplus to government program needs. We are concerned, however, that increasing sales targets have influenced ORC to reduce attention to proper classification of properties and therefore proper treatment of environmentally significant lands. To maximize its profits, ORC attempts to maximize the development value of the public lands it sells, for example, applying under the *Planning Act* to divide properties into smaller and more numerous parcels; to rezone lands from open space to residential; to recommend changes to ESA boundaries; and to resist attempts by municipalities and other agencies to have legally binding conservation or agricultural easements placed on the properties.

ORC maintains that conservation and agricultural easements inhibit sales and devalue lands. In many cases, municipalities, conservation authorities and others have informed ORC that they believe the ESAs should remain protected. In such cases ORC has sold or transferred the most environmentally significant lands to other public bodies such as conservation authorities or municipalities, and has sold the remaining lands to developers. ORC has challenged the identification of ESAs or other environmental features made by municipalities or other organizations. This has sometimes resulted in negotiations and resolution of some conflicts by the Ontario Municipal Board.

In December 1997, the Ministry of the Environment extended MBS's Class EA for another two years, without reviewing whether ORC was meeting its requirements. Staff at the ministry told the ECO that MOE didn't have enough staff to carry out the review, and that the two-year extension would give all parties time to consider the environmental implications of the impending privatization of the government's realty activities. Despite a requirement in the Class EA for an annual report to MOE, no reports were ever submitted to that ministry. As a result of my review, MBS assures me that the outstanding annual reports have now been filed with MOE, and that the Realty Service Management Agreement between MBS and ORC will require future annual reports to be filed with MOE on a timely basis. Further, ORC proposes to include the Class EA annual reports in its corporate annual report, which will be available to the public through the Internet with linkages to the *EBR* Registry. I commend MBS for renewing its commitment to monitoring and annual reporting to MOE and the public.

Based on evidence reviewed by the ECO, the public has not had access to the records promised in MBS's SEV and required by its Class EA. It also appears that the public is not being given direct notification and the opportunity to comment on government plans to sell properties involving environmentally significant areas, as required by the Class EA.

MBS says that ORC has begun discussions with MOE on a new Class EA, to replace the existing Class EA when it expires in December 1999. This will require extensive public and agency consultation. The ECO will follow development of the new Class EA in 1999.

ECO Commentary

The ECO review of Management Board's Statement of Environmental Values shows that from 1995 to 1998, there was little compliance both with its SEV and with the *Environmental Bill of Rights* and its principles of accountability and transparent decision-making. Even though it has transferred responsibility for realty activities to ORC — and eventually will contract out these services to the private sector — MBS retains the responsibility for fulfilling the purposes of the *EBR*. I am pleased to report that MBS will review and improve current MBS and ORC practices, in a number of areas, as a result of this review.

Recommendation 2

In order to meet its SEV commitments, MBS should:

- **post any new real estate policies or revisions to existing real estate policies on the Environmental Registry for public comment;**
- **post on the Environmental Registry its annual plans for the government's real estate portfolio, required by its Directive on Real Property and Accommodation;**
- **ensure that the public records and annual reports prepared under the Class Environmental Assessment for Real Estate Activities be kept up to date and made available to the public;**
- **clearly assign its legislated environmental responsibility when it transfers its responsibility for government real estate services to the Ontario Realty Corporation or the private sector.**

Ministry of Transportation: Progress Toward Selected SEV Commitments

The Ministry of Transportation's Statement of Environmental Values says the ministry will integrate the purposes of the *EBR* into its actions by promoting the use of public transportation, reducing transportation-related air emissions, and working toward a planning process that is open to comment and scrutiny.

In our review of MTO's SEV, the ECO found that MTO provides very little support for public transit, does little to monitor local public transportation systems and does not actively participate with the Ministry of the Environment in furthering Ontario's Smog Plan.

Why are MTO's SEV commitments important for Ontario's environment?

Vehicle emissions are the number one cause of smog in Ontario and are a major source of greenhouse gases. In Ontario, the transportation sector accounts for more than half of NO_x and CO emissions and approximately 30 per cent of VOCs, and is a major source of inhalable particulate matter. Sulphur levels in Ontario's gasoline and diesel fuel supplies are the highest in the country and among the highest in the industrialized world, contributing further to our air quality problems. Sulphur dioxide is a primary precursor for acid rain and acid aerosols/sulphates that become embedded deep in lung tissue. There is no known safe level for exposure to sulphate particles.

A heavy reliance on the automobile also has fiscal implications: to accommodate an increasing number of drivers, new highways are built and existing highways are expanded and maintained. According to MTO, the ministry has contributed $600 million annually in the past two years for preserving highway infrastructure. By 2000, MTO will have completed a four-year, $1 billion investment in Highways 401, 402 and the QEW alone. The number of licensed drivers in the Greater Toronto Area (GTA) is reported to have nearly doubled in the 1970s and 1980s, and recent projections indicate that the GTA will grow by two million people over the next 25 years. It is estimated that traffic congestion in the Greater Toronto Area costs Ontario's economy $2 billion a year in time delays and reduced productivity. According to the ministry, household expenditures on transportation in Ontario exceed $21 billion annually — about 17 per cent of family income.

Effective support for public transit has the potential to reduce this broad range of environmental and economic impacts. In fact, MTO asserted in a 1992 guideline that "transit is a more effective and efficient way of moving people within cities and towns than the private automobile," because it is more space-efficient, more energy-efficient and cleaner. If Metro Toronto did not have public transit, for instance, commuters would have driven an additional 3.5 billion kilometres a year and consumed an additional 297 million litres of gasoline per year.

ECO's review of MTO programs and activities has found that the Ministry of Transportation is doing very little to support public transit, in contrast to its SEV commitments.

Funding for local public transportation phased out

Municipal transit in Ontario has long been supported by provincial funding. In 1994, the provincial subsidy to all municipalities for transit operational costs was capped at $214 million and for transit capital costs at $236 million. From that time on, the provincial contribution to public transit costs began to decline. In 1996 the government announced a reduction of the provincial transit subsidy from 75 per cent to 50 per cent for items other than those related to safety. And in January 1997, the government announced that municipalities would soon be fully responsible for funding municipal transit, municipal airports, GO Transit, and highways that primarily serve local needs. Municipalities are now in the position of being solely responsible for financing public transit.

To help ease the transition for municipalities, MTO did announce the establishment of a "one time" $183 million Municipal Capital and Operating Restructuring Fund in March 1998. Municipalities that have GO Transit responsibilities will receive $106.5 million of the Fund, municipal transit programs will receive $69.96 million, and the remainder will go to airports. MTO has kept its contractual commitments to the Toronto Transit Commission's (TTC) five-year capital plan ($915 million), and the Sheppard Subway project ($511 million), by making a payment of $829.2 million to the City of Toronto in July 1998, reflecting the outstanding balance of its commitment. MTO is also keeping its commitment to provide a 75 per cent capital subsidy for the purchase of approximately 800 Orion buses by Ontario municipalities. However, funding cuts and decreasing ridership have precipitated years of downsizing for most community public transit systems across Ontario. The fallout from provincial downloading has not finished playing itself out yet. For example, the TTC has asked to raise its fares early in 1999 to cover operating shortfalls. The Chair of the TTC and the Mayor of Toronto have asked the Minister of Transportation to allow the city to establish a dedicated transit gas tax, similar to tax mechanisms now in place in Vancouver, Montreal and several large U.S. cities. But MTO is rejecting this approach, saying that the provincial government has given municipalities compensating tax relief by taking on most of the responsibility for education funding.

Some experts have predicted that the next few years will likely see many other reductions in transit services as municipalities cope with changing budgets and responsibilities.

No measurable transit goals or targets in MTO's 1998-1999 Business Plan

MTO's 1998-1999 Business Plan's first four core business goals focus mainly on driver safety and highways. The fifth goal is a "reliable, efficient, accessible and integrated" transportation system. The key performance measure attached to this goal is making sure that 90 per cent of Ontario's population live "within 10 kilometres of a major provincial highway corridor." Public transportation is not explicitly mentioned as a means of achieving an integrated transportation system, nor are terms such as "integrated" defined. The Business Plan contains no measurable public transit goals or targets, in spite of the ministry's SEV commitment to promote the use of public transit.

Little monitoring of local public transportation systems, no clear assignment of responsibility for public transit

MTO does not itself currently monitor local public transportation systems, although MTO staff say the ministry is looking at ways the province and municipalities could share information and databases on the overall transportation system. For example, the ministry has provided the Canadian Urban Transit Association (CUTA) with $15,000 to collect and analyze operating data for Ontario transit systems. MTO has also made a commitment to the Ontario Good Roads Association (OGRA) to provide funding for the development of a Municipal Infrastructure Data Base that is to provide a standard format for all municipalities to report on infrastructure, including public transit. MTO says that the collection of this data will provide current information on trends in public transit service and ridership across the province, allowing municipalities and the ministry to monitor jointly the performance and effectiveness of Ontario transit systems. It is too early to tell if this information will allow the monitoring to occur, and without this data, it is unlikely that the ministry will be able to promote an integrated transportation system — another aim stated in MTO's SEV.

In 1992, MTO and MMAH published Transit-Supportive Land-Use Planning Guidelines. The document is available for municipal land use planning, but the ECO is not aware of any ministry monitoring of whether these guidelines are actually being implemented.

The ministry's new Policy, Planning and Standards Division does have branches with responsibilities that touch on public transit issues, including offices that forecast transportation demands, plan special projects and help work on regional transportation plans. But the ECO was unable to identify a unit within the ministry with a clear responsibility for promoting public transit.

Slow progress and little public consultation on GTA Transportation Plan

Since 1995, MTO, along with the Ministry of Municipal Affairs and Housing and the Ministry of the Environment, has been working on a GTA Transportation Plan in cooperation with GTA municipalities. While a number of internal background and technical reports have been completed since 1995 for the Plan, they have not been made public, despite MTO's commitment in its SEV to an open planning process. MTO has indicated that another technical report is being prepared for the GTA Steering Committee, but that it will not be publicly available. The ministry has not indicated when a GTA Transportation Plan will be available for public review.

Lack of clear MTO support for Ontario's Smog Plan

MTO's SEV states that "*the ministry will seek to reduce transportation-related air emissions.*" This is an important commitment, since road vehicles are Ontario's number one source of smog-causing pollution. MTO's activities to reduce transportation-related air emissions have so far been restricted to some emission testing of the government's own vehicle fleet. In the fall of 1998, MTO began testing government vehicles in the GTA area, finding less than a 4 per cent failure rate among the 240 vehicles tested so far. This testing

program is expected to be expanded to the Niagara and Hamilton-Wentworth regions later in 1999. However, MTO decided not to get actively involved in an emissions-cutting plan of much larger significance — MOE's Smog Plan, announced in 1997. A broad coalition of representatives from industry, government and non-government sectors helped to develop the Plan. While MTO signed a Letter of Collaboration agreeing to do its best to reduce smog emissions, the ministry has not signed the finalized Smog Plan nor has the ECO found evidence that the ministry is actively collaborating with MOE to implement the Smog Plan's recommendations that relate to transportation.

ECO Commentary

Although MTO has committed in its SEV to promote the use of public transit, to seek to reduce transportation-related air emissions, and to work toward a planning process that is open to comment and scrutiny, ECO's review found very little evidence of progress toward these commitments. On the contrary, MTO has phased out provincial funding for public transit, does not itself monitor the status of municipal public transit systems, and includes no goals or targets for public transit in its Business Plan. MTO has been working on a Transportation Plan for the GTA since 1995 without releasing background technical documents, and with very limited public consultation. The ECO also found that MTO is not actively implementing Ontario's Smog Plan.

Recommendation 3

In order to meet its SEV commitments, MTO should:

- **monitor and report on trends in local and regional public transit across the province;**
- **support and implement MOE's Smog Plan recommendations relating to transportation;**
- **open up transportation planning (such as the GTA Transportation Plan planning process) to members of the public, including posting proposed plans on the Environmental Registry.**

Ministry of Economic Development, Trade and Tourism: SEV Commitments and the Support of Green Industries

The ECO reviewed MEDTT's SEV commitments to support the establishment and expansion of green industries; to support the development of environmentally sound production and processes; and to increase awareness in its client groups, through the information it provides and the decisions it makes, of the benefits of economic development that is sustainable in the environment. This review found little targeted support for green industries.

The Statement of Environmental Values of the Ministry of Economic Development, Trade and Tourism commits the ministry to integrating the purposes of the *EBR* into its mandate in the following ways: *supporting the establishment and expansion of green industries; supporting the development of environmentally sound production and processes; and increasing awareness in its client groups, through the information it provides and the decisions it makes, of the benefits of economic development that is sustainable in the environment.*

My review of MEDTT's progress on meeting its SEV commitments has revealed several initiatives in which support for green industries has been integrated into ministry programs and policies. In 1998, MEDTT published a 15-page brochure on Ontario's environment industry, outlining its rapid growth potential as well as the

SUPPORT FOR GREEN INDUSTRY: CROSS-CUTTING SOLUTIONS

The *Environmental Bill of Rights* was developed in part to ensure that environmental issues, which often require cross-cutting solutions and integrated planning, would no longer be the sole responsibility of the Ministry of the Environment (MOE). Although this ministry was assigned the lead role in the provincial Green Industry Strategy, several other Ontario ministries could also play a valid role in encouraging the environmental industry, which is a small but rapidly growing sector in Ontario, creating high-skill jobs and promoting environmental protection. For example, the Ministry of Natural Resources could focus on the forest industry, while the Ministry of Northern Development and Mines could concentrate on the mining industry.

Today, there is a good rationale for MOE and the Ministry of Economic Development, Trade and Tourism to share the lead responsibility for supporting Ontario's green industry, to cooperate on specific projects and to complement each other's strengths. This is particularly true for the programs carried out by MOE's Green Industry Office, which provides market intelligence and helps environmental companies to develop business plans, link with investment capital, and identify export opportunities.

MOE has told me that its Environmental Partnerships Branch has begun working more closely with MNDM regarding environmental aspects of the mining industry and opportunities for the environment industry. The branch anticipates new partnership work with the forest industry and will contact MNR to assist in this effort.

province's strong research and development infrastructure. MEDTT's Trade Development Division also assists Ontario industries, including the environmental industry, in acquiring foreign contracts. And MEDTT does refer some clients who are interested in clean and environmentally sound production processes to the Ministry of the Environment, though more referrals come from the Ministry of Agriculture, Food and Rural Affairs. Some MEDTT staff have also helped MOE develop guides to conserve water and energy and cut polluting emissions in specific industries such as the automotive, detergents and plastics reprocessing sectors. Typically, MEDTT staff review technical drafts of the guides, provide connections to Ontario manufacturers, and encourage industry contacts to see the guides as an opportunity to save money and resources.

Little targeted support for green industries

Beyond the initiatives mentioned above, however, MEDTT does not plan any other targeted support for green industries. The ministry considers that its core programs that foster industrial development are also available to the environmental industry. For example, the ministry has told me that MEDTT's Trade Team on Ontario's Missions to Argentina, Chile and South Africa in 1998 included green industry companies, and that a new MEDTT award program recognizing achievements of small exporters has honoured three green industry companies. The ECO has reviewed a number of the ministry's core programs and found little evidence that green industries receive any special encouragement through them, despite the ministry's SEV commitments. MEDTT should assess whether it is missing opportunities to support greener, cleaner production in Ontario and help the environment by directly or indirectly encouraging companies to conserve energy and water, cut pollution and carry out cleanups. Taking advantage of these opportunities would also have positive spinoffs for Ontario's economy. According to a 1997 survey, the environment sector is growing at a rate three times that of the Ontario economy, and sales are expected to double between 1995 and 2000, from $5.8 billion a year to $12.2 billion a year.

No mention of green industry in Business Plans

MEDTT's two recent Business Plans (1997-1998 and 1998-1999) make no mention of green industries or environmentally sound production processes. The ECO has seen no evidence that the ministry has measurable targets relating to green industry. MEDTT has told me that it includes green industry in its annual international trade development and trade relations activities, and that activities are planned by geographical region and are not always reported by sector activity.

No promotion of environmental issues by MEDTT regional development staff

MEDTT's regional offices and business development consultants connect with selected firms, business associations and municipal development associations across Southern Ontario. But their staff have little or no training on environmental matters, nor do they track environmental issues or referrals. MEDTT does not consider this to be part of the economic development role of its regional staff. The ministry notes that if client companies raise environmental issues, they can be referred to MOE or to the environmental protection indus-

try. While MEDTT has told me that its staff do provide linkages to environmental information and information on green industries, I believe MEDTT staff are missing many opportunities to encourage client companies to incorporate environmental considerations into economic planning.

No environmental information at Business Self-Help offices

There are 31 MEDTT/municipal Business Self-Help offices across Ontario that provide resource materials and personal advice on preparing a business plan or financing and managing a new business. But an ECO visit to one of the sites in downtown Toronto revealed no environmental information relevant to businesses, such as basic environmental regulatory requirements, opportunities for cutting the use of energy or water or polluting substances, or a directory of Ontario's environmental industries. MEDTT has indicated it would be prepared to provide such material from the local municipality, from MOE or from sources recommended by MOE should clients begin to request such information. This is unfortunately a reactive approach. Many clients starting new businesses may not have any idea of the environmental aspects of their business ventures. The Self-Help offices could be an ideal avenue for helping clients identify connections to environmental opportunities.

Provincial support for OCETA

MEDTT has been administering the Sector Partnership Fund, which has compensated MOE for its financial support to the Ontario Centre for Environmental Technology Advancement (OCETA). OCETA is a private sector, not-for-profit corporation established by the federal government, provincial governments and industry to help environmental companies with business plans, networking, market analysis, and applications for federal research funding. In 1996 and 1997, OCETA signed contracts with 56 client companies, created 190 new jobs, and generated $18.8 million in new economic activity. Some industry observers consider OCETA to be important in supporting fledgling environmental companies that would otherwise not have been able to get off the ground. While the federal government has decided to continue its support, MEDTT's funding for OCETA ends March 1999. MEDTT has told me that OCETA is well on its way towards self-sufficiency, and that the ministry is pleased that the cooperation between MEDTT and MOE and the support of the Sector Partnership Fund has had a positive role in OCETA's development.

ECO Commentary

While MEDTT has been involved in a number of modest initiatives to support green industries in Ontario, ECO research has identified several opportunities within the ministry's current programs to do much more effective work. To realize these opportunities, MEDTT should remind ministry staff that green industries do warrant attention, and should ensure that staff receive the training, information and resources to do useful work with this client group. MEDTT should also undertake some tracking mechanisms to establish the level of effort actually expended on green industries by the ministry and report the results of its efforts. Finally, MEDTT should work with MOE to clarify their respective roles vis-à-vis green industries, and should identify mechanisms to improve information exchange and cooperation between the ministries.

Recommendation 4

In order to meet its SEV commitments, MEDTT should:

- **track and report on actions it is taking to support green industries, to support environmentally sound production and processes, and to increase awareness of sustainable development in its client groups;**
- **pursue further opportunities within its core programs to support green industries, support environmentally sound production and processes, and increase awareness of sustainable development in its client groups;**
- **ensure that ministry staff receive adequate training, information and resources to promote environmental opportunities to their client groups;**
- **work with MOE to clarify their respective roles vis-à-vis green industries, and identify and implement mechanisms to improve information exchange and cooperation between the ministries.**

Ministry of Energy, Science and Technology: SEV Commitments to Promote Research into Environmental Sciences

In its new Statement of Environmental Values, the Ministry of Energy, Science and Technology has indicated that it wants to fund research into environmental science and technology. So far, the ministry's Ontario Research and Development Challenge Fund has invested in 31 projects, none of which were for environmental research, and given the structure of the Fund, few are likely to be undertaken in the future.

In its new Statement of Environmental Values, the Ministry of Energy, Science and Technology commits the ministry to the following actions: *"The following strategic directions will guide the Ministry's activities: . . . identification of opportunities to invest in science and technology and to use provincial investment to leverage financial support by the private sector and other parties to benefit the economy and people of Ontario in an environmentally sustainable manner . . . . "*

To this end, MEST has begun to administer the Ontario Research and Development Challenge Fund, which was established by the Ministry of Finance in May 1997 and is committed to disbursing $500 million over 10 years. According to MEST, the Fund is "designed to create alliances and collaboration between the private and public sectors to promote research excellence in Ontario while benefiting industries and stimulating high-value jobs in the future." Research programs of universities and other research institutions are encouraged to apply as long as they have already secured at least one-third of the funding from the private sector. According to administrators, the Fund will focus on five disciplines: natural sciences, engineering, mathematics, health sciences and environmental sciences.

The Fund's organization, however, is not very conducive to funding environmental research. Proposals are approved by five ministries — Energy, Science and Technology; Education and Training; Economic Development, Trade and Tourism; Finance; and Agriculture, Food and Rural Affairs. But the two ministries with significant mandates in the area of the environment — the Ministry of the Environment and the Ministry of Natural Resources — do not have a say. As well, the Fund focuses strictly on cutting-edge research and will not support research into testing and adapting existing technology. However, an important barrier to the adoption of cleaner industrial production processes in Ontario, according to MOE staff, is the lack of testing here of technology that exists elsewhere — since it can be risky for companies to be the first to test and adapt a technology that is new to Ontario.

In the first year of the Fund, 31 projects were judged suitable for funding, including research in health, pharmaceuticals, aerospace and manufacturing. But there was no funding for environmental research.

Fund administrators will not be tracking how many approved projects involve environmental research. And although fund administrators acknowledge that few other sources of government funding exist for environmental research, there are no criteria requiring that a specific amount of the funding actually support envi-

ronmental research. Although MEST is administering the Fund, under these conditions it is unlikely the ministry will fulfil its SEV commitment to invest in environmentally sustainable science and technology.

MEST has told me that its SEV should not be interpreted as an intention to direct a stream of funding into environmental technologies. Rather, MEST intends to integrate environmental sustainability as a consideration in the program areas of its mandate. MEST also considers the funding of individual projects under the Challenge Fund to be of an administrative nature. MEST has also told me that the Ministry of the Environment had a pilot program, developed as a complement to the Challenge Fund, which was intended to remove the barriers to the adoption of new environmental technologies. The program was in place between May 1997 and November 1998, and is currently under evaluation.

Recommendation 5

MEST should restructure the funding guidelines of the Ontario Research and Development Challenge Fund to ensure that practical, applied environmental research receives a fair amount of funding.

Changes to Ministries' Statements of Environmental Values

During 1998, the Ministries of Agriculture, Food and Rural Affairs; Citizenship, Culture and Recreation; and Municipal Affairs and Housing revised their Statements of Environmental Values to reflect the changes to their mandates that have taken place since their first SEVs were finalized in 1995. In addition, the newly created Ministry of Energy, Science and Technology proposed a draft SEV, which was finalized in early 1999. Late in 1998, I also learned that Management Board Secretariat is revising its SEV to reflect current ministry business. MBS expects to post its new SEV in 1999.

In reviewing the newly revised SEVs, I found several changes, some positive and others negative. The Ministry of Agriculture, Food and Rural Affairs removed several environmental commitments from its SEV. For example, the earlier SEV calls on the ministry to "*foster an economically viable, environmentally sustainable agriculture and food system,*" while the new SEV commits the ministry to "*foster competitive economically diverse and prosperous agricultural and food sectors.*" A commitment in OMAFRA's old SEV to "*ensure an environmentally responsible and sustainable agriculture and food system by working in cooperation with industry, governments, ministries and agencies and stakeholders*" was taken out of the new SEV. These changes are a major disappointment, and are not in keeping with the goal of the *EBR* to promote sustainability. When OMAFRA proposed this revised SEV in late 1997, I conveyed to the ministry my concerns that these changes reflected a retreat from environmental accountability. Unfortunately, in late 1998, OMAFRA decided to implement the revised SEV as proposed. In its decision notice on the Registry, OMAFRA indicates that it reviewed my comments, noting that "it is not the intention of the ministry to 'retreat' from its environmental responsibilities, but rather to integrate the consideration of the purposes of the *EBR* with the other social, economic and scientific aspects of the ministry's mandate." On a positive note, OMAFRA's new SEV outlines the ministry's process for considering the SEV. This process includes requiring staff to prepare SEV briefing notes for decisions, and monitoring the use of the SEV by maintaining records of SEV documentation.

The Ministry of Municipal Affairs and Housing developed a new SEV to replace the two SEVs for the former Ministry of Housing and Ministry of Municipal Affairs, which were combined by the current government in 1995. MMAH's new SEV is weaker than the previous SEVs of the two ministries. Despite the requirement in the *EBR* that SEVs should explain how ministries will consider the purposes of the *EBR* when environmental decisions are made, the SEV contains no direction on how the SEV is to be applied. Commitments to provide training for staff on the SEV are also missing. MMAH's new SEV also fails to carry over commitments from the earlier SEVs to minimize the environmental effects of the ministry's operations through reduction, reuse and recycling.

The new SEV of the Ministry of Citizenship, Culture and Recreation is quite similar to the earlier SEV of the Ministry of Culture, Tourism and Recreation. References to tourism were removed from the SEV in order to reflect the reconfigured structure of the ministry. MCzCR retains its commitment to monitor use of its SEV and to cooperate with the ECO in reviewing ministry compliance with the SEV. The ministry also added a commit-

ment to evaluate annually how its SEV is being used within the ministry, and to review the SEV if the ministry's Core Business Activities change substantially.

The above ministries at least made the effort to revise their SEVs. Outdated SEVs that refer to programs or areas of business that no longer apply to a ministry are of little use. However, in revising their SEVs, ministries should ensure that environmental commitments are not weakened, and that commitments to monitor and review SEVs are not lost.

Recommendation 6

All *EBR* ministries should, when revising their SEVs, ensure that environmental commitments are not weakened.

Ministry Business Plans

Ministry Business Plans were posted on the Environmental Registry for a 60-day comment period in May 1998. As part of the 1999-2000 business planning process, each *EBR* ministry has been asked by Management Board Secretariat to describe its strategy for honouring its SEV. Members of the public can use this opportunity to comment on ministry Business Plans to suggest how ministries should improve their commitments to environmental health.

In my annual report last year, I found that commitments made in the Statements of Environmental Values by provincial ministries were not reflected in their 1997 Business Plans. I encouraged ministries, when developing their 1998 Business Plans, to reflect how environmental health has been incorporated into the core businesses of the ministry. However, the majority of the 1998 plans show no improvement in this area.

Management Board Secretariat posted the 1998-1999 Business Plans of *EBR* ministries on the Environmental Registry as an information notice, noting that the plans are administrative in nature and do not need to be posted on the Registry. The posting included a 60-day comment period, and indicated that although the posted plans were final, public comments could be considered in the next year's planning process. I do not agree that Business Plans are administrative in nature. Business Plans are designed to indicate the future direction and key priorities of government ministries. Members of the public should have an opportunity to comment on the environmental directions ministries plan to take and the degree to which environmental considerations are incorporated into the plans. I also recognize, as noted by MBS, that the business planning process is an ongoing one, and that Business Plans are therefore quite different from most proposals that ministries post on the Registry. I therefore recommend that the *EBR* ministries continue to post their finalized Business Plans for comment each year, and consider the comments of the public in the following year's planning process. When the next year's Business Plans are released and posted on the Registry, ministries should post decision notices on the previous year's plans, indicating how many comments were made on those plans and how the comments were considered in preparing the new plans.

In my review of the 1998 Business Plans, I noticed that commitments to environmental protection and public consultation in the 1997 plans have been further weakened. For example, in 1997 the vision statement of the Ministry of Northern Development and Mines included reference to "an economically and environmentally sustainable mineral industry," while in 1998 the ministry's vision was that the provincial minerals sector should be "healthy, competitive and sustainable." Mention of the environment was removed. In the Ministry of Natural Resources' 1998 Business Plan, I noticed that the 1997 target of achieving a high level of public satisfaction with their involvement in decisions related to fish and wildlife and forest management had been removed. In 1998, only one ministry added a reference to the environment to its Business Plan: Ontario Ministry of Agriculture, Food and Rural Affairs added a commitment to "apply environmental sustainability principles when making decisions based on this Business Plan."

Several opportunities to integrate SEV commitments into ministry Business Plans were overlooked. The Ministry of Health's SEV contains a commitment "*to move to effective prevention and promotion activities in the control of cancer and support the elimination of pollutants and carcinogens as causative agents.*" While the Business Plan does reflect the ministry's commitment to "expand prevention programs designed to reduce people's health risks," the focus is exclusively on raising public awareness about lifestyle issues. The elimination and reduction of pollutants, including carcinogens, is not mentioned. The plan acknowledges that working with other ministries is a vital aspect of prevention, but indicates that MOH plans to work with social services and education ministries only, and not with the Ministry of the Environment. In its SEV, the Ministry of Municipal Affairs and Housing commits to maintaining (where appropriate) Building Code standards for energy and water conservation. However, in its 1998 Business Plans, one of MMAH's goals is a streamlined Building Code focusing on health, safety and accessibility, and not on energy and water conservation. And, as discussed on pp. 73-76, the ministry has weakened the energy conservation provisions of the Building Code considerably.

Even where ministries do include environmental goals, performance measures are often weak. One of MMAH's goals is to define and represent provincial interests (such as protecting agricultural lands and provincially significant natural areas) through the land use planning process. However, performance measures related to land use planning measure only the timeliness of ministry decisions and the ministry's progress in delegating powers to municipalities. The Business Plan of the Ministry of Energy, Science and Technology sets a goal for increasing renewable energy, but sets no targets for the desired level of production, and the ministry has no programs to achieve this goal. In contrast, MNR included clearer, more quantifiable measures in its 1998 Business Plan compared to those included in the earlier plans. Ministries should ensure that relevant targets are developed to measure progress toward environmental goals in their Business Plans.

There was a positive development related to business planning in 1998. Management Board Secretariat has informed me that it has added environmental considerations into the 1999-2000 business planning framework for all ministries. In preparing next year's Business Plans, each *EBR* ministry is being asked to describe its strategy for honouring its Statement of Environmental Values. I look forward to seeing these strategies in the 1999-2000 Business Plans.

Recommendation 7

All *EBR* ministries should continue to post their finalized Business Plans for comment each year. When the new Business Plans are posted, ministries should post Environmental Registry decision notices on the previous year's plans, indicating how many comments were made on those plans, and how the comments were considered in preparing the new plans.

Recommendation 8

All *EBR* ministries should develop relevant targets and indicators to measure progress toward environmental goals in their Business Plans.

Recommendation 9

All *EBR* ministries should incorporate SEV commitments into their Business Plans, and track and report on progress toward meeting those commitments.

Detailed Reviews of Ministry Decisions and Proposals

The *Environmental Bill of Rights* was created with the purpose of protecting, conserving and restoring the integrity of the environment. This section of the ECO's 1998 annual report contains detailed reviews of several significant government proposals and decisions — including proposals for new legislation posted on the Environmental Registry — which may have serious consequences for the environment of Ontario.

During the coming year, I will continue to monitor whether the outcomes of these proposals and decisions are consistent with each ministry's Statement of Environmental Values and the purposes of the *EBR*, and whether the public was involved in ministry decision-making.

Ontario's Progress on Climate Change

A key method of controlling the greenhouse gases (GHGs) responsible for climate change is to improve energy efficiency. Numerous Ontario ministries have made commitments to energy efficiency and conservation in their Statements of Environmental Values, and several 1998 Registry postings were connected to this issue, in particular, the *Energy Competition Act*, administered by the Ministry of Energy, Science and Technology.

The Ontario government's primary response to the problem of climate change is participation in the National Process on Climate Change. Other than that, Ontario is relying on existing programs, notably the Smog Plan and the Drive Clean program, as its contributions to combatting climate change.

This review of Ontario's progress on climate change has found that provincial ministries have not done the analyses necessary to support their assumptions about the ability of their programs to deliver reductions in greenhouse gases. The ECO also found that ministries do not have plans for consulting the public and that only limited staff resources have been assigned to the problems of climate change.

The ECO also looked at approaches to reducing GHG emissions that are within the jurisdiction of Ontario ministries. These approaches include opening the electricity grid to competition, emissions trading, feebates, alternate sources of energy, building code standards, energy efficiency standards and carbon taxes. We looked at the current status of these approaches in Ontario and asked whether they could be used effectively to combat greenhouse gases.

Climate Change: Introduction

Climate change has taken an increasingly prominent place on the agenda of environmental decision-makers in the late 1990s. I have focused on the issue of climate change for several reasons.

First, the *EBR* was created with the explicit purpose of protecting, conserving and restoring the integrity of the environment. Climate change will have serious impacts on all aspects of the environment in Ontario; indeed, some argue that its effects are already evident. Environment Canada predicts that these impacts may include:

- more heat waves in summer, combined with worsened air pollution
- droughts and a possible 20 per cent drop in Great Lakes water flow
- more severe storms
- more forest fires
- a possible northward shift of forest types and a possible loss of boreal forest
- change in the geographic distributions of many species, including the possible introduction of pests and disease organisms (such as malaria) previously not found in Ontario.

Environment Canada has confirmed that the summer of 1998 was the warmest on record in Canada. It was preceded by the second warmest winter on record and the warmest recorded spring. Globally, 1998 is expected to rank as the warmest year in the 150 years since global records have been kept.

The second reason for reviewing climate change is that improving energy efficiency is a key method to control the greenhouse gases (GHGs) responsible for climate change. Numerous Ontario ministries have made commitments to energy efficiency and conservation in their Statements of Environmental Values (SEVs), and the ECO is required to report on how ministries are complying with their SEVs.

Third, the ECO has also been monitoring several 1998 Registry postings connected to this issue. The Ministry of Energy, Science and Technology (MEST) posted the *Energy Competition Act*, a major new piece of legislation designed in part to "facilitate energy efficiency and the use of cleaner, more environmentally benign energy sources in a manner consistent with the policies of the Government of Ontario." MEST's Statement of Environmental Values contains similar commitments, and was also posted on the Registry in 1998. (For further discussion of MEST's SEV, see p. 31)

Increasing Emissions of Ontario Greenhouse Gases: Fossil Fuels vs. Nuclear Power

Ontario produced nearly 30 per cent of Canada's GHG emissions in 1995, almost as much as Alberta, and far more than any of the rest of the provinces. Although Ontario's GHG emissions held more or less steady between 1990 and 1995, they are projected to rise by about 12 per cent between 1995 and the year 2010. In fact, the federal government projected such a rise even before Ontario Hydro's unexpected announcement in August 1997 that it was shutting down seven nuclear reactors and shifting to more burning of fossil fuels.

Since making that announcement, Ontario Hydro has dramatically increased its purchases of coal power from U.S. sources, and has reported a 40 per cent increase in CO_2 emissions between 1996 and 1997. Moreover, emissions attributable to Ontario power use went up nearly 50 per cent in the first half of 1998 compared to the same period in 1997, mainly due to a fivefold increase in coal power purchases from the U.S. This is likely to have a significant effect on Ontario's overall GHG emissions.

Nuclear power has been the subject of intense and longstanding controversy, not only because of environmental safety and public health concerns, and the long-term cumulative costs of the technology, but also because of the difficulties of perpetual care for radioactive wastes. But nuclear plants do feature one important advantage: their operation does not produce the greenhouse gas carbon dioxide, or NO_x (nitrogen oxides) and SO_2 (sulphur dioxide), the key pollutants contributing to smog and acid rain.

Nuclear power, long an important component of Ontario's energy mix, supplied more than 60 per cent of the energy generated by Ontario Hydro in 1994, and fossil fuels supplied a mere 10 per cent. But today the mix has changed dramatically. Half of Ontario's nuclear capacity is now shut down, and in 1998 close to a quarter of Ontario Hydro's production was coal-fired. This has caused both an increase in Ontario's overall GHG emissions and a shift in the source of the emissions. In 1995, transportation emissions made up almost 30 per cent of Ontario's GHG emissions, while electricity generation made up approximately 12 per cent. Emissions from both sectors have since increased, and the proportions have changed, suggesting that Ontario's GHG reduction strategies will have to be accommodated to shifting emission patterns.

A CO_2 PRIMER:

Why focus on CO_2?

Answer: It is the predominant greenhouse gas, responsible for more than half the warming caused by gases released by human activity.

Why not remove CO_2 from smokestack gases?

Answer: Some pollutants can be "scrubbed" from smokestack gases by adding on emission control equipment. For example, particulates, sulphur dioxide or nitrogen oxides can be controlled this way at reasonable costs. While technology does exist to capture CO_2 from flue gases of power plants, it would increase the cost of electricity by an estimated 50 to 80 per cent. For the near term at least, this approach is not being pursued.

Which fossil fuels produce the most CO_2?

Answer: Carbon dioxide is emitted whenever fossil fuels are burned. But the rate of emission depends on the type of fuel. To produce the same amount of energy, natural gas produces less carbon dioxide than crude oil, which in turn produces less carbon dioxide than coal.

For example, to produce one Giga joule of energy, one could burn:

- bituminous coal, which would emit 25.8 kilograms of carbon
- or crude oil, which would emit 20 kilograms of carbon
- or natural gas, which would emit 15.3 kilograms of carbon.

Ontario's Response to Climate Change

The National Climate Change Process

The Ontario government is an active participant in the National Process on Climate Change. Led by First Ministers (including the Prime Minister, provincial premiers and territorial leaders), the National Process is the current forum for provincial/federal discussions on Canada's response to the Kyoto Protocol, which Canada signed in April 1998 but has not yet ratified. (See the discussion on the Kyoto Protocol on pages 49-52.) Although the federal government is legally empowered to ratify international agreements without provincial consent, all parties recognize that provincial buy-in will be very important, since the provinces will have to be convinced to implement many of the measures of the Protocol.

Currently, the National Process is focused on researching which reduction options are available across a wide range of sectors such as forestry, manufacturing, etc., each represented by an Issues Table. By May 1999,

each Issues Table is expected to submit a set of sector-specific options and cost estimates for addressing greenhouse gas emissions. It is not yet clear how the provinces and the federal government will sort through these lists and negotiate an agreed-upon set of actions to meet Canada's commitment under Kyoto. The negotiations are expected to take place over the summer of 1999.

Eight Ontario ministries are involved in the National Process, with representation on 14 of the 16 Issues Tables. For example, MEST is a member of the Technology Issues Table and the Electricity Issues Table; the Ministry of Natural Resources is a member of the Forest Sector Issues Table; the Ministry of Economic Development, Trade and Tourism is a co-chair of the Industry Issues Table. MOE is coordinating Ontario inter-ministry activities. Ontario's policy is not to advocate any particular approaches to the key issues, such as how reductions should be allocated or what types of reduction measures should be focused on. Thus far, Ontario's approach to these negotiations has not been open to public involvement, although there are industry and non-government organization representatives on the Issues Tables.

Reliance on existing programs

Currently, Ontario's action on greenhouse gases is restricted to tallying up reductions it expects to achieve with its existing programs and activities. Because the Ministry of the Environment's most recent summary of Ontario initiatives to reduce greenhouse gases was published in late 1996 and provides only illustrative examples of reductions rather than a comprehensive inventory, MOE staff are now working to identify the so-called "co-benefits" that come with initiatives like the Drive Clean program, the Ontario Smog Plan, and the restructuring of Ontario's electricity industry. MOE expects that these programs can deliver GHG reductions as side-effects of fuel switching or burning fuel more efficiently, which cuts other pollutants such as nitrogen oxides and volatile organics. MOE staff are hoping to produce an updated inventory as resources permit, but the ministry has not set a timeline for its publication.

Because programs such as the Smog Plan and Drive Clean are still in development, it will be difficult for MOE to estimate accurately what GHG emission reductions can be ascribed to them. For example, many of the improvements expected from the Smog Plan can occur only if recommendations are accepted, which then will be carried out on a volunteer basis by industries and municipalities. MOE's progress in promoting these Smog Plan recommendations has been slowed down because some of its available staff have been shifted to work on the Drive Clean program. MOE has told me that the ministry is now accelerating staff recruitment to address air issues.

The Drive Clean program has itself been delayed repeatedly, and is now slated to start up in the spring of 1999 in the Toronto-Hamilton regions, with expansion into other areas expected two years later. Although MOE predicts that up to 900,000 tonnes of CO_2 emissions can be cut annually by the Drive Clean program once it is fully implemented, the ministry has no analysis to support this figure. Ministry staff acknowledge that the emission reductions are likely to be smaller, even if very optimistic assumptions about the program's success are made.

Little effort to accelerate existing programs or to start new initiatives

Moreover, aside from establishing landfill gas regulations, the Ministry of the Environment has few plans to accelerate or modify existing programs or to start new initiatives to reduce GHG emissions. Even though MOE has an Air Policy and Climate Change Branch, it does not appear that the climate change issue is a major driver of policy for any current Ontario programs.

No updated reduction target

Although Ontario supports Canada's signing of the Kyoto Protocol, MOE has not strengthened its target for reducing Ontario GHG emissions to reflect the Kyoto target. Instead, it is still operating with an old target — "stabilizing greenhouse gas emissions at 1990 levels by the year 2000" — according to the Ministry of the Environment's most recent publication in December 1996.

No public consultation plan

Although MOE staff are responding to specific requests for information, the Ontario government has no public consultation plan on climate change issues under way or in development.

Limited staff resources

In spite of the vast scope and complexity of the climate change issue, Ontario ministries have only a tiny contingent of staff assigned to the topic. MOE has assigned three full-time and several part-time staff to the issue, including the director of the Air Policy and Climate Change Branch, and MEST has six staff involved on a part-time basis, focused on attending the meetings of the National Process on Climate Change led by the federal government.

Recommendation 10

MOE should develop an action plan on climate change, including:

- **establishing emission reduction targets for greenhouse gases to reflect the Kyoto target;**
- **evaluating the various policy and regulatory approaches that could be utilized;**
- **establishing a consultation process to ensure meaningful public involvement in evaluating, prioritizing and implementing its approach.**

Recommendation 11

All *EBR* ministries should collaborate with MOE in developing and implementing an action plan on climate change.

DRIVE CLEAN

The Ministry of the Environment's Drive Clean program has been much publicized by the Ontario government, even though it is substantially behind its start-up date. The ECO's review suggests that this program will contribute to reducing only a small amount of the smog-causing agents emitted by vehicles. But Drive Clean will be effective in reducing even that small amount only if identified weaknesses in the program are corrected. Other parts of this report show that Ontario ministries need to carry out much more than a Drive Clean program to ensure that vehicle emissions do not continue to pose a major threat to the health of Ontario residents and that their contributions to Ontario's greenhouse gas emissions are effectively controlled.

In my 1997 annual report, I discussed the decision of the Ministry of the Environment to implement Drive Clean, a vehicle inspection and maintenance program designed to reduce pollutants coming from cars, trucks and buses. Vehicle emissions constitute the greatest source of pollutants that cause smog in Ontario, and vehicles that are not regularly tuned can emit significantly higher levels of pollutants than those in good repair.

Under Drive Clean, light-duty vehicles (cars, vans, small trucks) that are more than three years old, and all buses and heavy-duty trucks, will have to undergo emissions testing at approved testing facilities. Testing for light-duty vehicles will be required every two years (at a cost of $30/test, initially), while trucks and buses will be tested annually. If they do not meet specified standards according to their model year, they will have to undergo repairs or their registrations will not be renewed.

Following several years of program development, Drive Clean was announced by MOE as a proposed policy in the summer of 1997. The program was originally scheduled to begin operation by the summer of 1998, and the decision to go ahead with Drive Clean was posted on the Registry on December 1, 1997, with a 30-day comment period (no public comments were received by MOE).

However, the commencement date for the Drive Clean program has been repeatedly postponed. It now stands at April 1, 1999, for light-duty vehicles in the Greater Toronto Area and Hamilton-Wentworth. For the 13 other urban areas in Ontario to which Drive Clean applies, the commencement date is January 1, 2001. Mandatory province-wide testing of heavy-duty trucks and buses will also begin in 1999 as part of their annual safety inspections.

Although it is necessary to have properly trained vehicle inspectors and mechanics and to work out final program details, the delay in initiating the Drive Clean program is lamentable. As the number of cars on the road increases and Ontario's air quality continues to worsen, the need for emissions improvements grows more urgent.

In last year's annual report, I noted some weaknesses in the Drive Clean program:

- Vehicle testing and repairs can be done in the same shop, creating a potential conflict of interest and the risk of fraudulent testing and repair work.
- Drive Clean is not following some of the key recommendations contained in a Code of Practice developed by the Canadian Council of Ministers of the Environment.
- Certain key procedures in the operation of the program had not yet been finalized.

These issues are still outstanding and cause concerns about the integrity of the program. Evidence from other jurisdictions with vehicle inspection and maintenance programs in place indicates that the success or failure of such a program depends largely on the details of the program design. In response to my concerns about potential conflict of interest, MOE states that rigorous quality assurance features have been designed into the program and fraudulent activities will be identified through spot checks and auditing. I will continue to monitor the implementation of the program as it unfolds.

In addition, MOE may have overestimated the vehicle emission reductions that can be achieved by Drive Clean. In its Registry notice and other releases, MOE claims that Drive Clean is expected to cut vehicle emissions of smog-causing pollutants by 22 per cent, including 60,000 tonnes of NO_X/VOC per year. MOE also states that Drive Clean can cut up to 900,000 tonnes of CO_2 per year. However, statistics offered by other jurisdictions with similar programs indicate that the results in Ontario will likely be more modest, as we note in our discussion of climate change.

Some critics of vehicle inspection and maintenance programs note the high costs that may come from the testing and repair fees charged to drivers, the investment in technology and equipment by mechanics, and the administrative costs of government. These critics contend that the relatively modest benefits of such programs do not justify the cost. In addition, this kind of program tends to place the greatest financial burden on owners of older, poorly maintained cars, people who might be least able to afford the necessary repairs. They argue that the provincial government should consider other kinds of emission reduction programs that may yield greater returns on the total cost.

However, despite its weaknesses, Drive Clean is a step in the right direction toward achieving better air quality in Ontario. It will reduce noxious emissions from vehicles to some degree, and will increase awareness among drivers. It is a sign that the government is willing to take action against poor air quality, which, according to recent polls, is the primary environmental concern of the people of Ontario. The Drive Clean program is preferable to having no vehicle inspection and maintenance program at all. A comparable program has existed in British Columbia since 1992. In the United States, 38 states have established vehicle inspection and maintenance programs. The B.C. program reports many positive results and findings:

- Air quality in the Lower Fraser Valley has improved during the last five years.
- One out of every seven inspections reveals a vehicle that fails the test.

- The average repair required on a failed vehicle ends up saving the driver 5 per cent of previous fuel costs.

Drive Clean is limited in the results it can achieve, and numerous other measures are necessary to address smog. First, Drive Clean will have minimal positive effect if the number of vehicles on the roads continues to rise. Even if Drive Clean operates successfully, MOE and other ministries must turn their attention to reducing the number of cars on the road by curbing urban sprawl and expanding public transportation (see p. 94). Second, MOE must adopt a tough stand on industrial emissions (especially by older plants with certificates of approval that might be out of date) and on other sources of pollution such as residential and commercial furnaces, small motors, and evaporation from paints and solvents. Finally, MOE should complete its ongoing project of updating its regulatory standards for air contaminants, and should assign adequate compliance and enforcement staff to ensure that the new standards are met.

Drive Clean has been publicized by the provincial government with much fanfare. The ECO hopes that it achieves its goal of reducing smog-causing agents emitted by vehicles. The success of the Drive Clean program rests in the balance, and the ECO will continue to examine its progress in future annual reports.

Recommendation 12

MOE should develop programs to reduce smog-causing pollutants from area sources and industrial emissions, update its regulatory standards for air contaminants, and allocate sufficient human and financial resources to ensure rigorous enforcement of all air pollution regulations and standards.

Climate Change: Background

Is the earth warming?

According to scientists, this century's warming is without precedent in 1,200 years and cannot be explained by natural forces. 1998 surpassed 1997 as the warmest year on record. The warming trend is the result of the accumulation of so-called "greenhouse gases" (GHGs) in the atmosphere. Man-made GHGs originate from transportation sources, from energy production and from other industrial activities.

Why is the earth warming?

As GHGs accumulate in the atmosphere, they cause the earth's temperature to rise because they help the atmosphere to retain more heat from the sun. The GHGs are:

- *carbon dioxide*
- *methane*
- *nitrous oxide*
- *hydro fluorocarbons*
- *perfluorocarbons*
- *sulfur hexafluoride*

Each GHG has specific properties and some have greater potential to warm the atmosphere than others. Carbon dioxide has the highest concentration in the atmosphere of the six GHGs but the lowest warming potential. Although emissions of carbon dioxide are generally more than 100 times the level of methane emissions, one tonne of methane causes as much warming as about 30 tonnes of carbon dioxide. In other words, one tonne of methane is equal to about 30 tonnes of "carbon dioxide equivalents." The other GHGs can also be expressed in terms of carbon dioxide equivalents.

Global Action on Climate Change

Chronology of action

Although concern had been expressed earlier, it wasn't until the Toronto Conference in 1988 that action to deal with the changing atmosphere was recommended by the international scientific community. The conference called for a 20 per cent cut in carbon dioxide emissions by 2005. Soon after, the United Nations General Assembly established the International Panel on Climate Change to review the science of climate change. In 1990, the UN Economic Commission on Europe called for a Framework Convention on Climate Change (FCCC) and stabilization of GHGs. This treaty set a voluntary goal of cutting emissions back to 1990 levels by 2000.

In 1992, at the UN Conference on Environment and Development in Rio (The Earth Summit), the FCCC was opened for signatures. More than 150 nations signed the treaty, which called for nations to promote awareness about climate change but contained no legally binding targets. In 1994 the FCCC came into force. Annual

Conferences of Parties began in Berlin in 1995, where a resolution was adopted to seek a legally binding protocol by 1997.

At the Third Conference of Parties in Kyoto, Japan, in 1997, the Kyoto Protocol was adopted, in which industrialized countries agreed to reduce their GHG emissions. The Protocol was agreed to by all 159 national delegations.

The Kyoto Protocol

In essence, the Kyoto Protocol says that each of the developed countries agrees to a "reduction commitment" ranging up to 8 per cent, depending on the country. The reductions are to be applied to 1990 emission levels and are to be achieved between 2008 and 2012. The nation-by-nation reductions translate into a reduction of 5.2 per cent below the 1990 levels for industrial nations taken as a whole. Details of implementation and timetables were to be decided in Buenos Aires in November 1998.

As well, the Kyoto Protocol contemplates:

1. a system for emissions trading among countries
2. projects between industrialized and developing countries
3. a fund to enable action by developing countries

Articles 24 and 25 of the Protocol provide that it will be "open for signature" at the UN headquarters in New York until March 15, 1999, and that it will enter into force 90 days after at least 55 countries, accounting for 55 per cent of the 1990 carbon dioxide emissions, have ratified it.

Important milestones at Buenos Aires, 1998

Buenos Aires was the Fourth Conference of the Parties and was intended to work out the implementation details of the Kyoto Protocol. As had occurred at Kyoto, the rich and poor nations disagreed on the issue of emissions trading.

A Plan of Action on Climate Change was signed expressing further commitments to strengthening and implementing the FCCC. At this time, the Kyoto Protocol had been signed by 60 countries. In a departure from the position taken by a large group of developing countries, Argentina committed to a voluntary, binding commitment to reduce GHGs.

Commitment was made to the three Kyoto Protocol Mechanisms:

1. international emissions trading
2. joint implementation (between developed countries)

3. clean development mechanism (CDM), which includes joint projects between developed and developing countries, and enables developing countries to receive tradeable credits for financing emission reduction projects in other countries.

Major weaknesses in the Kyoto Protocol

Many experts have pointed out the key weaknesses of the Kyoto Protocol in battling manmade global climate change:

1. The doubling of greenhouse gas emissions by 2100, even if the Kyoto Protocol's limits are met. Emissions from developing countries are rising rapidly and will soon exceed industrialized world emissions.
2. Mistrust between the developed and developing countries and suspicion of each other's motives. Differences between the United States and Europe over "burden-sharing" and emissions trading. Political infighting resulting in a weakened ability to deliver a climate change program in the United States.
3. The "flexibility" of allowing emissions trading, whereby nations could buy greenhouse gas emission allowances from countries that have exceeded their emissions reduction commitments. This is a highly controversial provision for a number of reasons, including the following:
   (a) It would allow the developed countries to buy their way out of keeping their commitments, and thus evade the necessary development of effective climate change control policies.
   (b) It would allow developed countries to purchase allowances from former Soviet Republics whose emissions have been reduced by political factors. In this scenario, emissions trading results in higher emissions than would have occurred without emissions trading.
   (c) It would undermine more legitimate cooperative ventures between developing and developed countries, e.g., U.S. investment in Eastern Bloc climate projects.
   (d) It would be difficult to oversee, administer and coordinate.
4. The provision that allows a country to offset required emissions with "carbon sinks." For example, by sponsoring a tree-planting project, a country can lower its commitment for carbon dioxide reduction. Besides creating another accounting nightmare, biologists point out that there are not yet enough data on natural carbon cycling to establish full verification procedures for carbon sinks.
5. The concept of "carbon dioxide equivalents" which makes accounting very complex. Since the minor gases have much greater global warming potential than carbon dioxide, only a small reduction in them will translate into large carbon dioxide equivalents. But it is very difficult to verify these minor gas reductions since no reliable inventories are available.
6. The International Panel on Climate Change estimates that reductions of 60-80 per cent below 1990 levels are required to achieve stable CO_2 emissions. However, when the "Kyoto-reduced" industrialized emissions are added to emissions from developing countries, the result in 2010 will be an increase of 30 per cent *above* 1990 levels.

7. The Protocol does not address the fact that the collapse of the Soviet Union has already resulted in emission reductions from 1990 levels far in excess of the reduction goals of the former Soviet Republics, making their commitments meaningless.

Will the Kyoto Protocol work? What is really needed?

The Kyoto commitments can be viewed as little more than a first step. Most experts agree that rollbacks of 60-80 per cent (and not 5.2 per cent) are needed to stabilize carbon dioxide emissions and climate. Global climate responds to total GHG concentration, and thus adaptation by humanity will continue to be the main method for coping with climate change. GHG reduction is an energy problem which can be solved only by increased efficiency and decarbonization of energy sources. Most experts say that only new and improved energy technologies will result in reductions in GHGs of the necessary magnitude. It is therefore necessary to invest in more efficient and less carbon-dependent energy systems rather than incur near-term costs of GHG reductions. There is a need for a global energy technology strategy and a means to implement it.

Some observers argue that the Kyoto Protocol is fundamentally flawed because of its obsession with short-term goals. Immediate investment in new technology would be far more efficient and cheaper in the long run: only new and improved energy technologies can result in reductions to GHGs of the necessary magnitude, without significant economic and social pain. The first step, according to one expert, should be the development of a critical technologies list for the utilities industry, heavy industry, transportation and housing. There is increased recognition of this fact in the U.S., and promising technologies now available or under development include the following:

Transportation — electric hybrid engines that combine gasoline/diesel engines with electric motors. Fuel cell technology is advancing rapidly.

Power plants — efficient and low carbon energy-generation technologies, including combined cycle gas turbines.

Renewable energy sources — wind, solar power, hydropower, biomass.

Emissions trading as laid out in the Kyoto Protocol remains a controversial issue. The U.S. favours the use of emissions trading over national emissions targets to achieve Kyoto's goals. Europe favours higher taxes as well as command and control strategies such as fuel efficiency requirements for vehicles and mandated pollution controls for utilities and industry.

Ratification is uncertain. The Kyoto Protocol was signed by the United States but still requires ratification by the U.S. Senate, where opposition is anticipated. The U.S. will not ratify unless all nations, not only industrialized nations, are included. Resistance from big business and big labour point to "uncertain science" and predict a decline in the country's economic growth as a result. But the Protocol's champions include U.S. Vice President Gore, the Intergovernmental Panel on Climate Change, and some large oil companies. Economic predictions of the costs associated with the Kyoto Protocol vary enormously. All agree that energy-intensive industries would be the hardest hit.

Canada and Climate Change

Setting Canadian climate change policy (the federal/provincial process)

Domestic climate change policy is in the hands of a joint federal-provincial council of energy and environment ministers that meets annually to review progress. In 1992, the ministers adopted a Comprehensive Air Quality Management Framework for Canada and held a number of meetings to study options. A draft paper presented at Bathurst, New Brunswick, in 1994 had the expressed goals of stabilizing GHGs by 2000, and the development of options for further progress in reductions by 2005. The emphasis was on a national voluntary program and on energy efficiency initiatives.

Subsequent meetings of the ministers to approve the National Action Plan on Climate Change (NAPCC) placed emphasis on voluntary cost-effective strategies. In late 1997, the ministers committed to stabilize GHGs at the 1990 levels by 2010. When the federal government unilaterally committed to a 6 per cent reduction target at Kyoto in December 1997, the provinces balked. In particular, Alberta demanded extensive consultation prior to ratification of the Kyoto Protocol. This consultation is now under way. Alberta feels most vulnerable economically to the national climate policy and is the strongest proponent of voluntary actions. Alberta is also the highest per capita producer of carbon dioxide.

Although Kyoto commits Canada to reduce GHGs to 6 per cent below 1990 levels by 2010, current "business-as-usual" projections for 2010 put emissions at about 20 per cent above 1990 levels. Canada's approach to meeting its targets involves a series of measures that include energy efficiencies and a few economic instruments. The centrepiece is the Canadian Voluntary Challenge and Registry Program, which has enjoyed very limited success. As part of NAPCC (1995), Canada agreed to quantitative benchmarks, but few have been set. A federal goal is to engage municipalities through the Federation of Canadian Municipalities. This effort has met with some success.

Canada at Buenos Aires, 1998

At Buenos Aires (1998), Canada asked for agreement on a standard unit for emissions trading that could become the system's currency, and called for national registries of available credits. Canada wants private companies to participate directly in trading rather than working through governments, and is aligned with the U.S. against a European Union attempt to limit the trading regime. Canada also supported plans to examine the development of clean technologies and encouraged private sector involvement.

What could Canada do?

The Pembina Institute has recommended 15 steps that Canada should take in order to meet its Kyoto commitments:

- improved and mandatory fuel economy standards for vehicles
- phased increases in gasoline and diesel taxes
- actions to increase public transit use
- mandatory renewable energy content in gasoline
- ensuring a level playing field for electricity generation
- adopting an 8 per cent renewable energy portfolio standard by 2010
- providing incentives to produce electricity from waste solution gas in fossil fuel production
- taking actions to improve energy efficiency in industry
- mandating the capture of landfill methane gas
- reducing GHG emissions from the agricultural sector
- cost-effective retrofit of residences
- mandating R-2000 building codes for homes
- cost-effective retrofit of commercial buildings
- providing federal support for district energy
- using the Kyoto Protocol flexibility mechanisms

What Could be Done by Ontario Ministries to Reduce GHG Emissions: Theory vs. Action

Over the last decade, numerous policy and regulatory approaches to reduce Ontario GHG emissions have been promoted and debated. The Government of Ontario has clear jurisdiction to take strong action to reduce these emissions. To illustrate some of the options that are available, the ECO has focused on a number of broadly endorsed approaches that are within the jurisdiction of the provincial government. In our reviews, we have considered how these approaches to emissions reductions work in theory, who recommends them, how they are used in other jurisdictions, their current status in Ontario, and any cautions or downsides to these approaches. These approaches include:

Climate Change: Opening the Electricity Grid to Competition

How "opening the grid" works in theory

There is a worldwide trend to encourage more competition within the electricity industry, which until very recently has been controlled by government utilities. This move to deregulation, or competition, is prompted in most cases, not by environmental goals, but by economic and political goals. Governments expect that this move to "open up the electricity grid" to the private sector, allowing small independent power producers — or "non-utility generators" (NUGs) — to sell electricity on the existing transmission grid, will result in more efficient, cheaper and cleaner electricity production. This is because most government utilities rely on large, capital-intensive power plants, whereas NUG power tends to be more energy- and cost-efficient to operate.

The following list ranks various types of electricity production, from those with the least greenhouse gas emissions to those with the highest greenhouse gas emissions per unit of energy created. This ranking does not

GREENHOUSE GAS EMISSIONS FROM DIFFERENT TYPES OF ELECTRICITY PRODUCTION

No or negligible GHG emissions

Wind, hydro, solar, nuclear, geothermal

Minor GHG emissions

Biomass (including woodwaste and fuels such as ethanol produced from corn)

Landfill gas

Municipal solid waste

Major GHG emissions - fossil fuels

Fuel cells (varies depending on the fuel mix and whether cogeneration is involved)

Combined cycle natural gas plants (turbines) - with cogeneration producing usable heat

Simple cycle natural gas plants (turbines)

Older natural gas plants

Conventional natural gas plants (boilers)

Coal and oil-fired plants retrofitted with more efficient engines

consider other factors such as technical feasibility, cost, or other environmental impacts.

NUG power provides other environmental, economic and social benefits beyond reducing greenhouse gases. For example, renewable energy produces less SO_X, NO_X, and mercury than coal-fired generation, reducing local and regional air pollution. Energy-from-waste (creating power by burning garbage or woodwaste, for example) diverts waste from landfills. Cogeneration (the simultaneous production of electricity and useful heat or the capture of wasted heat produced in the generation of electricity) allows energy consumers such as large factories to reduce their demand for electricity from the grid and even sell excess power to other customers.

The largest reductions in greenhouse gases would be achieved by replacing the province's coal-fired electricity with renewable energy. Even replacement with natural gas would have a significant impact, as CO_2 emissions per unit of electricity from natural gas-fired cogeneration are about two-thirds less than emissions from Ontario's existing coal-fired generating stations.

Where and how is this approach used in other jurisdictions?

Many countries are opening their grids to competition, including the UK/Wales, Argentina, Australia, New Zealand, Norway, and Japan. In addition, many American states and five Canadian provinces have opened their grids for wholesale competition, including California, New York, New Hampshire, Massachusetts, Maine, Alberta, British Columbia, Quebec, Manitoba and New Brunswick. In Canada, only Alberta and Ontario are currently moving to full competition at a retail level.

As they open the grid to competition, these governments are also setting rules and offering incentives to influence the private sector to produce cleaner energy. There are many different tools being tried out by governments deregulating the electricity sector. They include:

- emission cap and trading systems (limits on the maximum amount of pollution allowed from a source, with tradable credits or pollution allowances)
- renewable portfolio standards (legal requirements for electricity generators to provide a certain percentage of their energy from renewable energy)
- generation performance standards (regulated limits on the pollutants emitted per unit of energy from a source)
- generation source disclosure or labelling (a requirement for energy retailers to inform consumers of the source and environmental impacts of the electricity they sell)
- taxes or subsidies (to offset capital costs of investment in renewable energy)
- green power marketing (allowing energy providers to offer customers "green" energy for higher prices)
- research and development funding.

Many jurisdictions worldwide have used a mix of tax incentives, emission standards and access to power markets at fixed or special prices to increase the production of renewable and cogeneration electricity. For example, the U.S. government has proposed a renewable portfolio standard of 8 per cent. A few states have exceeded that goal already, including Maine, which set a renewable portfolio standard of 30 per cent when it passed a utility deregulation law in 1997. More than 10 U.S. states and several countries have established some form of systems benefit funds — or wires charges — essentially an energy tax to fund conservation programs. Allowing electric utility customers to produce cogeneration and renewable energy for their own use and to sell electricity through the utility transmission grid is common to all of the exercises in opening the grid to competition.

Current Status in Ontario

The Ontario provincial government has complete jurisdiction to regulate the energy industry.

Since 1906, the government-owned monopoly, Ontario Hydro, has controlled the generation and sale of electricity for commercial distribution. While non-utility generators have existed in Ontario for many years, their use of Ontario Hydro's transmission grid was possible only under contract with Ontario Hydro. Hydro started an interim market experiment in 1995 to allow NUGs to compete against it, but the experiment was tightly con-

trolled by Hydro and accounted for less than 1 per cent of provincial energy requirements. Very recently, Ontario Hydro has begun to purchase electricity from NUGs and to allow some cogeneration facilities. By 1998, 8 per cent of Ontario Hydro's power was supplied under contract by NUGs.

When the current government came to power in 1995, it began to explore electricity restructuring, including consideration of how best to manage the environmental effects of such deregulation. In 1996 the Advisory Committee on Competition in Ontario's Electricity Sector (The Macdonald Committee) reported that "the process of restructuring Ontario's electricity system must be accompanied by consideration of the most appropriate regulations or other instruments to secure the protection of the environment and specifically, to support energy efficiency and the introduction of renewable energy technologies."

In 1997, the government released a "White Paper," which contemplated an emissions cap and trading program, and emission performance standards for all generators selling power into the Ontario market.

In February 1998, Ontario Hydro began operating the Ontario Interim Market to replace power lost from the shutdown of half its nuclear operations, and started to open the market in preparation for full competition in the year 2000, as recommended in the White Paper.

The Ontario Market Design Committee (MDC) was established in January 1998 to advise the Minister of Energy, Science and Technology on the structure of Ontario's proposed electricity market, including the need for new environmental programs. In its second interim report, released on June 30, 1998, MDC acknowledged that "market failures . . . will continue to have an impact on the environment. For example, pollution currently causes harm that is not properly accounted for in the price of electricity." The MDC considered a wide range of potential tools to address this problem, but ended up recommending two customer-driven tools — green power marketing and generation source disclosure — and one market-based tool, an emissions cap and trading program.

The MDC rejected regulator-driven mechanisms such as a renewable portfolio standard or new taxes, surcharges or subsidies to increase demand side management programs and renewable energy, believing that the market mechanisms would take care of emissions for the least cost.

Bill 35, the *Energy Competition Act (ECA)*, was passed by the Ontario government in October 1998. (See discussion on p. 142.)

Cautions

Will CO_2 emissions increase?

Unless Ontario moves to set rules and offer incentives to the private sector to produce cleaner energy, as other governments have done, the most serious environmental downside of opening the grid to competition in Ontario is the risk that CO_2 emissions and other pollutants will actually increase.

In jurisdictions that have been using mainly coal-fired power plants, competition forces will tend to phase out

coal and phase in less polluting natural gas. In these areas, opening the grid may well lead to emissions reductions.

The Organisation for Economic Co-operation and Development's Report on Regulatory Reform (1997), pointed out that for systems that are largely non-fossil (i.e., hydro- and nuclear-based) competition threatens to increase CO_2 emissions. A 1998 issue paper prepared for the Ontario Market Design Committee confirmed that the Ontario system would fall into this category, and could potentially be faced with an increase in emission levels under deregulation. Any new fossil-based NUGs, even high efficiency natural gas-fired plants, will release more CO_2, SO_X and NO_X than the nuclear power they are replacing.

An even worse outcome would be the increased import of electricity from dirty coal-fired plants from the U.S. MEST has assured the public that no new coal-fired plants are expected to be built in Ontario once competition arrives, because it is cheaper and more efficient to build natural gas-fired plants. But it is faster and cheaper yet to import electricity from existing coal-fired plants in the U.S, and the Minister of Energy, Science and Technology approved an Ontario Hydro request in October 1998 to double its allowable level of imports from the U.S. A senior MEST official estimated in November 1998 that 25 per cent of all electricity in the open market would be imported from the U.S. Since the shut-down of half of Ontario Hydro's nuclear plants, MEST says that the displaced nuclear power has to be replaced by coal-fired generation in the absence of new gas-fired capacity.

Introducing competition could also extend the life of older coal-fired plants, because once a company, whether in Ontario or the U.S., spends millions of dollars to improve emission controls on an older plant, they will want to run it as much and as long as possible to recover their costs. MOE and MEST say that the economics of this investment decision will depend on how expensive it would be to meet the environmental regulations adopted for the new electricity system and on how much it would cost to upgrade a coal-fired plant compared to the cost of converting from coal to natural gas. Clearly, it will depend on the new regulations promised for the new electricity system by these two ministries.

The *ECA* has spawned a vigorous debate about the environmental consequences of opening the grid. Many parties believe that opening the grid in itself will not reduce CO_2 emissions, because NUG power, and particularly renewable energy, is still more expensive than fossil fuel, especially in the short term. The market alone will not reduce CO_2 emissions, because the environmental costs of dirty fuel are not incorporated in the price of energy. Many stakeholders maintain that additional regulatory measures, such as a significant cap on emissions, a renewable portfolio standard or a systems benefit charge, are required. MEST and its Market Design Committee maintain that the tools they are introducing will provide the most cost-effective pollution control, and they resist any attempts to force the uneconomic production of renewable energy.

The government is planning an emissions cap and trade system, but MOE is currently developing regulations to cap emissions of only two pollutants, SO_X and NO_X, with no new limits on other emissions such as CO_2 until perhaps 2007. The Ministers of the Environment and of Energy, Science and Technology promised in

October 1998, however, that "we will be developing regulations setting emission limits that are equally tough to those proposed in the U.S." The ECO will continue to monitor the design of the new electricity market by reviewing new regulations as they are proposed.

What is the potential for NUG power?

The Ministry of Energy, Science and Technology currently estimates that the production of a very small amount of new wind power (about 60 MW) and a small amount of hydro power (about 500 MW) could be economically feasible in the next few years, but expects most new energy production (up to 9,000 MW) will be by gas-fired industrial cogeneration plants.

The Ontario government's plans to increase competition have resulted in announcements in 1998 of about $1 billion worth of private sector proposals for high-efficiency natural gas cogeneration, energy-from waste, wind and small hydro. MEST says that the new announcements have a potential capacity of about 1,500 MW, which represents about 6 per cent of Ontario's peak demand, a significant amount of capacity to be proposed in the year since the government's policy was announced.

Will renewable energy increase?

MEST's 1998-1999 Business Plan includes the goal of increasing the production of renewable energy, but sets no targets for a desired proportion of renewable energy. Nor is the ministry taking any actions to increase the production of renewable energy, other than letting consumers opt for green energy, for which they will have to pay extra. The government maintains they have removed barriers to renewable energy production, but they are going to let the market decide how much renewable energy is economical.

Moreover, under the proposed regulatory system, the government has not in fact removed all the barriers. Ontario's existing coal-fired and nuclear plants will be subsidized by new NUGs, because the existing Ontario Hydro debt from building large, capital-intensive power plants will be paid for by everybody, including the new NUGs, Hydro's competitors in the new electricity market. Thus, the customers of the new NUGs will have to pay for the NUG's capital costs, operating costs *and* a share of Ontario's stranded debt. MEST says that the new successor companies will be assigned their own debt in proportion to the value of their assets (the portion of the debt which is not stranded).

Experts estimate that Ontario Hydro's existing coal-fired plants can be operated for about 3.5¢ per kWh. New gas-fired cogeneration plants can be built and operated for 4.5¢ to 5¢ per kWh. As the chart on page 64 shows, renewable energy supply costs are much higher than fossil fuel supply costs. As an added disadvantage, the government has promised new market rules intended to keep the cost of electricity low for consumers. This makes it highly unlikely that renewable energy technologies could compete economically in an open market against existing Ontario coal-fired plants, cheap coal-fired energy imported from the U.S., or new gas-fired cogeneration plants.

HARNESSING THE WIND

How it works

Power from the wind is extracted by turbines. Modern wind turbines resemble large airplane propellers as opposed to traditional farm windmills. Although wind turbines currently generate one per cent of the world's energy supply, wind power is the fastest growing of all energy sources. Technological improvements are improving the cost-effectiveness of wind power relative to conventional oil, gas and coal-based energy sources. By some estimates, the potential for global wind energy is roughly five times the current global electricity use.

What's happening in other countries?

It has been reported that in Denmark in 1997, wind power generated 6 per cent of the country's electricity, giving Denmark the highest per capita output of wind energy in the world. Close to 100,000 Danes have formed cooperatives, each operating a handful of wind turbines, for a total of 4,700 in all. Wind power is encouraged throughout Europe by improved technology, decreasing costs, and government incentives like tax credits and guaranteed prices. Several governments have set targets to stimulate wind power production. Growth is also being spurred on by the European Union's drive to diversify energy sources while curbing pollution and by the lack of political support for expanding nuclear power plants. Policy makers in Europe point to wind energy as a key example of the possibilities for cutting pollution without jeopardizing economic growth or jobs. With windmills located from Spain to the coast of Sweden, it has been estimated that Europe's wind industry employs 20,000 people.

What's happening in Canada?

The Canadian Wind Energy Association asserts that Canada has more wind energy potential than its current total use of electricity. The Association also estimates that wind power could supply up to 20 per cent of Canada's electrical requirements. Both Quebec and Alberta are moving forward with wind energy projects. Quebec has an ambitious wind power program mainly because the province has established a legal requirement for electric utilities to develop alternative energy sources. Such a requirement is similar to a "renewable portfolio standard," whereby utilities are required to make a verifiable increase in the use of alternative energy. According to the Quebec government, the le Nordais wind project, in addition to reducing greenhouse gas emissions, is projected to have the positive socio-economic impact of creating 1,000 person-years of employment during construction alone. Phase one will comprise 76 turbines, and phase two, 57 turbines.

In Alberta, the Cowley Ridge wind generating plant produces enough power to serve 6,800 homes per year. Calgary's Enmax has become the first electrical utility in Canada to offer its residential customers the option of buying wind power. For an extra monthly fee customers can direct the utility to purchase wind-generated power. Enmax notes that the additional cost is required because in Alberta wind power is about twice as expensive as coal-powered energy. If wind power increases in popularity, says Enmax, the cost would become cheaper. Some federal government offices in Alberta and business customers get all of their power requirements met by wind energy provided by Enmax.

What's happening in Ontario?

Ontario Hydro operates a 600kW demonstration wind turbine in Tiverton. In 1995, during its first year of operation, the turbine produced enough electricity to serve 152 homes. The Toronto Renewable Energy Co-operative (TREC) is moving forward with plans for a 660kW wind turbine, to be situated on Toronto's waterfront. The turbine is projected to generate between 1.2 and 2 million kilowatt hours of electricity per year, enough power for 170 to 300 homes. TREC estimates that the turbine would save the equivalent in CO_2 emissions of more than 800 round trips from Toronto to Miami Beach in a minivan. The plan is that the wind turbine will produce electricity for the Toronto power grid and that members of the co-op will benefit because they will receive a credit on their Hydro bills.

The outlook for the future

Technological advances may bring decreases in the costs of producing wind power. In light of the opening of Ontario's electricity market, however, there needs to be a concerted effort by the Ontario government to develop more effective incentives to increase wind power generation in Ontario.

COGENERATION

How it works

A cogeneration facility is one that produces electricity and other forms of useful thermal energy such as heat or steam that can be used for heating or cooling purposes. Cogeneration equipment can be fired by natural gas or other fuels such as wood, agricultural waste, peat moss, etc. The environmental advantages of cogeneration stem not just from its efficiency, but also from its decentralized character, because the facility is located physically close to the user. This reduces transmission losses, lost current, and the need for distribution equipment. Cogeneration plants tend to be smaller and may be owned and operated by local companies.

What's happening in other countries?

In its 1995 Climate Change Report, the Intergovernmental Panel on Climate Change (IPCC) reported that the United States, Finland, Denmark, the Netherlands, Sweden and Germany have many small-scale cogeneration facilities in the industrial sector. This development has been spurred by new technological developments and by changes in laws governing electrical utilities. Industries in these jurisdictions can sell surplus electricity to utilities, which are required to purchase it at favourable prices. More recently, it has been reported that cogeneration in Denmark supplies 40 per cent of the electricity used and that the government is aiming for a 65 per cent share by 2005. It has been estimated that by 2010, all of Denmark's power not provided by wind energy may come from cogeneration. In the Netherlands, it is estimated that cogeneration provides 30 per cent of the total power supply.

What's happening in Ontario?

Cogeneration facilities are operating in Ontario. The plants are diverse in nature. In Chatham, a second ethanol plant has opened in eight years. The plant consumes corn to produce fuel ethanol, opening up a new market for local corn growers. The cogeneration installation in this plant provides process heat to cook the corn mash and distill the ethanol, as well as half the plant's electrical power. In Iroquois Falls, a cogeneration power plant uses natural gas to generate power that is sold to Ontario Hydro and steam that is sold to a pulp and paper mill. Toronto Hydro has recently entered into a joint venture with a Quebec firm to develop a 112 MW gas-fired cogeneration plant in downtown Toronto. A plant of this size produces enough energy to power a city the approximate size of Whitby or Kingston. Toronto Hydro estimates that this plant will help the City of Toronto meet nearly 10 per cent of its CO_2 emission reduction target.

The outlook for the future

The opening of Ontario's electricity market, coupled with the initiatives of public sector utilities and private sector companies, appears to be encouraging the development of cogeneration in the province.

CAPTURING THE SUN

How it works

Solar power can be gathered through either "active" or "passive" means. Active solar power involves using photovoltaic cells that convert energy from the sun's rays directly into electricity. Solar thermal systems such as hot water heaters are also considered "active." Passive solar power involves using building components and design (walls, windows, floors, roofs, landscaping) to capture the sun's energy or to control the heat generated by solar energy.

What's happening in other countries?

Solar power is beginning to rise to its potential. The Worldwatch Institute reported that sales of solar cells expanded more than 40 per cent in 1997 and that world solar markets are growing at 10 times the rate of the oil industry. Since 1980, the price of solar cells has fallen by 80 per cent as the technology matures. It is still far more expensive, however, than traditional energy sources.

The business of solar energy is currently valued at $1 billion a year, according to the Worldwatch Institute, with recent sizable investments by energy companies. The investments include new manufacturing plants, which could double global production of solar cells over the next several years.

A growing portion of the world's solar cells is going to meet household needs. Both the European Union and the United States are developing "Million Roofs" programs, aimed at installing a million rooftop systems by 2010. In the United States, the federal government has designed the program and is proposing a 15 per cent solar tax credit and funds to support partnerships with utilities, builders, local governments and financial institutions. Japan, one of the world's solar leaders, had 9,400 solar home systems installed in 1997, with another 13,800 expected by the end of 1998. Generous tax credits and high electricity purchase prices are credited for giving the Japanese solar program a boost, encouraging major building companies to bring out new lines of solar-powered homes. In industrialized countries, companies are now integrating solar cells into roofing tiles and window glass, allowing homes and office buildings to generate some of their own power and sell extra electricity back to the utility.

What's happening in Ontario?

The Ontario government has done very little to encourage solar power other than to support or promote demonstration projects such as Toronto's Healthy House, which opened in November 1996.

In the fall of 1998, two "solar-friendly" initiatives were begun. Greenpeace launched a solar energy program in Ontario, seeking 200 people who would pledge $2,700 for the installation of two 100-watt solar panels, enough to run a television set. Greenpeace estimates that the 200 installations could replace 70 tonnes of coal a year burned in coal-fired generating stations. Toronto Hydro announced a 25-point CO_2 reduction plan. Measures include the purchase of renewable-source energy from Ontario Hydro's Renewable Generation Pool, a solar-powered telephone on a major Toronto roadway to increase the visibility of photovoltaic technology, and a net billing program to encourage customers to put up their own small generating facilities such as wind and solar. Under the net billing approach, when the customer's system generates more energy than is needed, the customer receives a credit and the excess power goes to the utility grid.

The outlook for the future

The literature on the long-term potential of solar energy still points to the need for lower prices, decreased government barriers to the development of solar industry, and incentives to boost further technological improvement. Without additional incentives from the province, Ontarians are not likely to see much solar energy in the near future.

Comparison of Costs and CO_2 Emissions of Fossil vs. Renewable Energy in Ontario

Electricity Source	Costs (Estimated levelized or supply costs, in Canadian cents/kWh)	CO_2 Emissions (kg/K Wh)
Existing coal-fired plants in Ontario	3.8 (upgrading and operating costs) only — does not include capital costs)	major 975-1400
New gas-fired cogeneration plant	4.5-5	major 373-500
Landfill gas capture	3.6-4.3	minor
New small-scale hydro	4.1-7.1	none
New wind	5.4-9.4	none
New solar	65.1 - 113.9	none

Who will promote energy conservation?

Many experts argue that the most effective way to reduce greenhouse gas emissions is not to clean the energy production process, but to reduce energy use. Governments have traditionally been responsible for energy conservation programs. Up until the mid-1990s, there was a range of programs sponsored by government ministries, Ontario Hydro, the natural gas utilities, municipalities and other organizations. Competition may threaten conservation programs, because it isn't in the interest of companies competing in an open market to try to reduce the amount of energy they can sell.

The tools being implemented by MEST and MOE under the *ECA* are "end of pipe" solutions, which focus on cleaning up emissions after coal or other fossil fuels have been burned, or tools that rely on faith in the market and customer choice to produce cleaner energy and reduce demand. The government does have existing programs in place to reduce energy demand, most notably the *Energy Efficiency Act* and *Building Code Act* regulations. But there are no new measures being planned by the government to replace the loss of Ontario Hydro's conservation programs. In fact, the government assumes that energy demand will continue to grow by 300-400 MW a year. And if energy prices fall, as the government expects, then consumers may well use more energy, not less.

It remains to be seen what role the Ontario Energy Board may play in promoting energy conservation. There are a number of different tools governments can use to encourage energy conservation. They include a wires charge or "systems benefit charge," government energy conservation programs, establishing new agencies to promote conservation, or regulating companies to carry out conservation programs. Despite a recommendation from the MDC that the government retain and increase its role in energy conservation, the government

has rejected all of these proposed measures, and MEST is not planning any new energy conservation programs.

Green power marketing and the pollution disclosure requirements — techniques that are still unproven — may have limited effects, because they assume that customers will freely choose to pay more.

What about other environmental impacts of NUGs?

A final caution: other environmental effects of electricity production could worsen. MOE has already begun to simplify the approvals process for cogeneration facilities and to allow the burning of different types of materials as fuels. Government initiatives to streamline the approvals processes of various ministries to encourage NUG power could have a downside if the other environmental impacts of hydro dams, burning waste-for-energy, or other types of energy production are not properly considered.

Recommendation 13

In order to ensure that Ontarians have access to safe, reliable and environmentally sustainable energy supplies, MEST should:

- **develop, in consultation with the public, further mechanisms necessary to protect the environment, consistent with the Market Design Committee's final report and MEST's SEV commitment.**
- **establish and carry out programs to reduce consumer energy demand and clearly support and promote both public and private sector energy efficiency initiatives.**
- **set targets for the increased production of renewable energy, and develop and implement programs that will encourage the development of renewable energy in the province.**
- **track and report annually on the "mix"of electricity generation in the province.**
- **report annually on progress in meeting its goals and targets for energy efficency and renewable energy.**
- **develop regulations to limit emissions of CO_2, mercury and toxics from electricity generators to come into force when a competitive electricity market is formally established.**

Climate Change: Emissions Trading

How trading programs work in theory

Emissions trading typically takes one of two forms.

Credit trading Under this concept companies can earn credits for reducing emissions below regulatory or voluntary standards, and then sell the credits to other companies. The program is usually used as an alternative to requiring all firms to comply with a regulatory standard. This is how it works:

- The owners of Source A and Source B must reduce emissions by 100 tonnes each to meet a regulatory standard.
- The cost might be $1,000 for each source to reduce 100 tonnes individually for a total cost of $2,000 and a benefit to the environment of a 200-tonne reduction.
- But Source A might be able to reduce its emissions by 200 tonnes for a total cost of $1,500. It could then sell credits for 100 tonnes to Source B, achieving the benefit to the environment of a 200-tonne emissions reduction for $500 less, or a savings of 25 per cent.
- As a trade-off for the lower costs, a credit trading program usually requires that a certain percentage of the credits that the source earns be "erased" without compensation. In this case, Source A may have to reduce its emissions by 210 tonnes, sell the credits for 100 tonnes to Source B, and "erase" the extra 10. Thus, emissions into the environment are reduced by 10 more tonnes than was required by the regulatory standard.

The purpose of allowing the use of credits is to reduce the cost of complying with regulations. The benefit to the environment of credit trading depends on whether this program can reduce emissions to the same degree as strict regulatory compliance.

Cap and emission allowance trading In this approach, the government establishes a cap on total allowable emissions from specific sources during a defined time period. It then distributes allowances to emit greenhouse gases, with total permitted emissions equal to the cap. Sources that expect to emit less than permitted by their allowances may sell extra allowances to other sources whose emissions would otherwise exceed the allowances allocated to them. Over time, the number of allowances in circulation can be reduced by the government and thus total emissions are reduced. Although it can be difficult for governments to set a cap, once set, it provides certainty that an overall emission reduction target will be met.

Who has recommended it?

International emissions trading is allowed and encouraged under the Kyoto Protocol but the principles, rules and guidelines have not yet been worked out. Many organizations and environmental groups have recommended emissions trading as a method to encourage reduction of greenhouse gases in Ontario. They include the Market Design Committee and Pollution Probe. During the hearings on the *ECA*, both of these groups recommended that the legislation include a cap and/or an emissions trading program.

Where and how is it used in other jurisdictions?

Trading programs have been in place in the United States since the 1970s. In 1976, the U.S. Environmental Protection Agency (USEPA) passed a rule under the *Clean Air Act* that established the first emissions credit trading program in the world. The USEPA allowed firms to build new facilities in areas that did not meet USEPA air quality standards under two conditions. First, the new facility had to meet all regulatory standards, and second, the new emissions had to be offset with emissions reductions achieved at other facilities owned by the firm.

The experience with cap and trade

The U.S. Title IV Acid Rain Program was established in 1990 under the *Clean Air Act* to reduce sulphur dioxide emissions from electric utilities by 7.7 million metric tonnes between 1990 and 2010. Initial allowances were based on historical production levels and decrease over time.

According to research prepared in 1998 for Ontario's Market Design Committee, the U.S. Acid Rain Program has led to both reduced emissions and reduced costs. Emissions were below 1995 and 1996 target levels by 3.4 and 2.9 million tons respectively. In addition acidity in rainfall in the northeast declined by 10 to 25 per cent in 1995. In terms of cost savings, the USEPA estimates that trading under the Acid Rain Program will save utilities as much as $1.7 billion annually after 2000.

In California, the Regional Clean Air Incentives Market (RECLAIM), a cap and emission allowance trading program for oxides of nitrogen and sulphur oxides, was established by the South Coast Air Quality Management District. It was developed as an alternative to the District's 1991 air quality management plan, which relied on command and control regulations. About 400 facilities, representing about 65 per cent of emissions, are captured under the nitrogen oxide trading program, and about 41 facilities, representing 85 per cent of point source emissions, are captured under the sulphur oxides program.

Although RECLAIM has achieved emissions reductions, the program highlights why some experts argue that greater emission reductions occur through the use of prescriptive regulations than through trading. First, RECLAIM took a significant amount of time to develop, during which time sources were not subject to prescriptive standards. Second, because all firms involved in the program chose baseline years in which industrial activity and the pollution associated with it were high, allowable emissions under RECLAIM were 16 per cent higher than actual emissions during the initial years.

Current Status in Ontario

The provincial government recently acknowledged its jurisdiction to establish a cap and emission trading program in Ontario in Bill 35.

Bill 35 - *Energy Competition Act*

Under Schedule D of the *ECA*, Cabinet directs the use of market-based instruments such as emissions trading to reduce emissions and lower the cost of meeting limits on emissions.

Pilot Emissions Reduction Trading

The Ontario government is currently involved in a credit trading program known as Pilot Emissions Reduction Trading (PERT). The purpose of the project is to assess the potential environmental and economic benefits of emission reduction trading in Ontario and to identify the elements of an effective trading system design. While focusing primarily on those pollutants that cause smog, trading of reductions of other pollutants is now under way. Emission reduction credits are created when a source reduces its emissions below either the actual emission level or the level required by regulation, whichever is lower. Credits must be real, surplus, quantifiable and verifiable. All credits are posted to a registry on an electronic bulletin board system to provide access to the public and any potential purchaser. An environmental benefit has been incorporated by retiring 10 per cent of any credits earned. To encourage and reward participants in the PERT project, MOE has signed a Letter of Understanding with PERT participants, which assures them of recognition of early reductions. No cap, other than limits established in regulation, has been set.

Existing caps

Regulatory and voluntary caps on emissions currently exist for Ontario Hydro for sulphur dioxide, nitrogen oxides and carbon dioxide. Under Regulation 355 of the *Environmental Protection Act*, Ontario Hydro can emit no more than 175 kilotonnes of sulphur dioxide per year and 215 kilotonnes of sulphur dioxide plus nitrogen oxides per year. In addition, Ontario Hydro has voluntarily committed to stabilize its emissions of carbon dioxide at 1990 levels by the year 2000, and to reduce them by 10 per cent by 2005. Ontario Hydro has also made a voluntary commitment to limit net emissions of nitrogen oxides to 38 kilotonnes per year by the year 2000.

According to the Market Design Committee, existing regulations that pertain only to Ontario Hydro will no longer be adequate in the newly competitive electricity market.

To establish a cap and emission trading program, the government needs to resolve the following issues noted by the Market Design Committee:

- Which sources should be included in the scope of a cap and emissions allowance trading program?
- Which pollutants should be included?

- At what level should the cap be set?
- Which formula or other mechanism should determine the distribution of allowances?
- What kind of monitoring requirements should be imposed on emitters?
- What levels of enforcement are necessary?
- What measures are in place to protect against local air pollution problems arising from a trading program?

Cautions

Need for transparency and accountability

The ECO's preliminary review of PERT published in last year's annual report notes that emissions trading as a tool for pollution reduction requires transparency and accountability measures such as an accurate, up-to-date inventory of emissions, an agreed-upon cap on total emissions for a given locality and the institutional ability to verify reduction rates.

Do some credits represent emission reductions that would have occurred even if the trading program did not exist?

Credit trading will be as effective at reducing emissions as strict compliance with regulations only if the credits represent an emission reduction activity that would not have been undertaken under the regulatory program. However, it is impossible to determine accurately whether or not a project would have occurred if the trading program did not exist. For example, the economic collapse of the former Soviet Republics means that many central and eastern European countries are expected to be approximately 150 million tons below their GHG limits each year during the 2008-2012 Kyoto commitment period. The Kyoto agreement allows them to trade these credits even though they would never have been emitted.

Regulations may need to be more stringent in a program that allows trading

Because it is likely that any credit trading program will give credit for some emission reductions that would have occurred even without the program, regulations may need to be more stringent in a program that allows trading than one that does not. Alternatively, a program could require a portion of credits to be "retired." However, credit trading will still reduce the effectiveness of regulations unless the retirement requirement more than compensates for credits for emission reductions that would have occurred even if the program had not been in place. On the other hand, if a requirement is imposed to retire a sufficiently large number of credits, credit trading could benefit the environment.

To ensure environmental effectiveness, designers of a cap and emission allowance trading program must make certain the program includes two critical components:

- the cap is set at a level below actual emissions at the beginning of the program
- the program includes an effective monitoring and enforcement component.

The RECLAIM experience with cap and trade programs indicates that the desire to win support for a particular allocation system may lead to a higher cap being set.

Need for monitoring and enforcement

An appropriate monitoring and enforcement system can ensure effective compliance. Under the Title IV Acid Rain Program in the U.S., utilities are required to install tamper-proof continuous monitoring systems or fixed monitors where the sulphur content of fuel is constant. If these systems indicate that the utility has emitted more sulphur than is allowed, the utility must pay a fine of $2,000 a ton. The fine is imposed whether or not the utility was negligent in allowing the exceedence to occur. Violators must also remediate their exceedence by reducing future emissions to a level which is equal to their allowed emissions level, less their past exceedence.

According to the Market Design Committee, an emissions trading program system would not introduce complex monitoring issues in Ontario. Almost all fossil fuel generation facilities in Ontario have implemented either continuous emission monitoring systems or flue gas monitoring systems, another monitoring method of comparable effectiveness. However, as noted earlier, an enforcement system has yet to be determined. Without these ingredients, a cap and emission allowance program may not produce environmental benefits.

Recomendation 14

As part of the emissions trading program for the electricity sector, MOE should:

- **develop and maintain, together with MEST, an accurate, up-to-date inventory of emissions for all electricity generators;**
- **set emission limits at a level below actual emissions at the beginning of the program and ensure effective monitoring and enforcement of the limits.**

Climate Change: Feebates

How feebates work in theory

Ideally, the full environmental costs of producing and burning gasoline would be reflected in the price that drivers pay at the pump. But, in fact, prices for gasoline have declined since the 1970s, not only in Ontario but in North America generally, and currently represent only a small part of the overall cost of owning a car. Because of this, new car buyers are not usually concerned about fuel efficiency. Car manufacturers, in turn, are paying less attention to fuel efficiency in new car designs, with the result that average fuel efficiency gains in new cars have been modest in recent years, when contrasted to the big improvements of the mid-1970s and early 1980s. At the same time, the total number of vehicles on the road is constantly growing, and on average, cars are being driven longer and for longer distances per year. So greenhouse gas emissions from vehicles are rising.

In this situation, governments can use feebates (or "gas guzzler taxes") as a price signal to encourage car buyers to purchase more fuel-efficient car models. A government applies a variable fee (a tax) on new vehicles, depending on the fuel efficiency of each model. Under some schemes, governments also provide rebates to purchasers of the most fuel-efficient vehicles (thus the term "feebate"). Feebates can be applied instead of, or in conjunction with, fuel efficiency standards for new vehicles. Of course, the effectiveness of a feebate depends greatly on the size of the fee compared to the overall vehicle cost, and also on how well the feebates reflect the fuel efficiency of each model.

U.S. analysts predict that feebate taxes of between 2 per cent to about 5 per cent of new vehicle costs could result in an approximate 30 per cent cut in fuel consumption by the year 2010. In contrast, fuel taxes would have to increase the cost of gasoline by a factor of approximately 2.4 to get a similar effect.

Who has recommended feebates?

The Ontario Fair Tax Commission (in 1993), the Intergovernmental Panel on Climate Change (in 1996), and the California Energy Commission (in 1998) have all advocated the use of feebates to encourage sales of energy-efficient vehicles. The Ontario Fair Tax Commission recommended that "Ontario should extend the Tax for Fuel Conservation to light trucks and vans and then adjust rates to provide stronger incentive to purchase fuel-efficient vehicles."

Where and how are feebates used in other jurisdictions?

In the U.S. at the federal level, a gas guzzler tax has been in place since 1980, and was tightened in 1986. There is evidence that it has improved the fuel economy of the least efficient part of the vehicle fleet. Maryland has approved — but not yet implemented — a special tax on fuel-inefficient vehicles. Taxes related to emissions or fuel economy also exist in Austria, Denmark, Germany and Sweden.

Current Status in Ontario

A weak feebate scheme now exists in Ontario, administered by the Ministry of Finance, called the Tax for Fuel Conservation. This tax was established in 1989 and expanded in 1991. Although this feebate scheme has been described as groundbreaking and as an important first step, analysts have also pointed out that in its current form, it does little to meet its stated environmental aims. They point out that:

- The tax applies only to passenger cars and sport utility vehicles. Light trucks and vans are excluded from the tax/credit scheme, even though these vehicles consume a lot of fuel, and accounted for approximately 25 per cent of the vehicles sold in the province in 1992.
- About 90 per cent of cars sold in Ontario are subject to a flat tax of $75, even though these car models have fuel efficiencies that range from 6 litres/100 km to almost 9 litres/100 km. So car models that are almost 50 per cent less efficient still carry the same tax. As a result, the $75 flat tax does not influence buying decisions for about 90 per cent of cars.
- The tax is not advertised in showrooms, so most car buyers don't find out about the tax until after they have bought the vehicle.

This tax currently generates an estimated $40 million in revenue for the Ontario government, with approximately 50 per cent of that revenue coming from sales of sport utility vehicles.

Progress over recent years

Ontario's feebate program has not changed since 1991. An expanded program was proposed in 1992 to cover all light-truck classes and provide rebates on fuel-efficient vehicles of up to $250, but was not enacted. An evaluation of the environmental effects of Ontario's current feebate program does not exist.

No changes pending

There are no plans to alter or dismantle this tax. The Motor Vehicle Manufacturers' Association has recommended that the tax be dismantled, but there are no plans to do this.

Cautions

Other things remaining equal, owners of fuel-efficient cars have an incentive to drive more, since their costs per kilometre are lower. Between 1978 and 1989, increased fuel efficiency in the U.S. contributed to increased driving, so that between 5 per cent and 30 per cent of the fuel-economy gain was lost through increased mileage. This side-effect could be avoided if feebate systems were strengthened simultaneously with increases in gasoline prices.

The overall fuel economy improvements expected from feebate systems depend strongly on how car manufacturers plan their future product lines. Experts emphasize that good faith participation by the car industry is needed in the development of feebate policies.

Climate Change: Building Codes

How building codes work in theory

Building codes are used by governments to set standards for insulation, heating, windows, lighting, air conditioning, general electrical consumption and other matters. Improved insulation and reduced air loss through windows, walls and roofs will reduce the amount of fuel or electricity used to heat and cool buildings and thus help to reduce GHG production. Energy-efficient buildings cost less to operate than other buildings.

Natural Resources Canada (NRC) estimates that heating now accounts for 60 per cent of Canadian residential energy use, and that the residential sector accounts for 17 per cent of all CO_2 emissions. NRC also estimates that space heating accounts for about 55 per cent of commercial energy use and that the commercial sector produces 12 per cent of all CO_2 emissions. So stronger energy efficiency standards could result in significant emission reductions in the future, but the improvements would be relatively slow, as they apply only to new buildings.

In the short term, energy efficiency measures add to the cost of construction. But in the long term, they reduce homeowners' energy costs. For example, NRC estimates that a new house meeting the federal Model National Energy Code for Houses 1997 would cost 30 per cent less to heat than a conventional new house; an R-2000[1] home would cost about 60 per cent less. A new home meeting the new federal code would reduce energy use by 11.5 per cent compared to a conventional home, and an R-2000 home would reduce energy use by 26 per cent. MMAH states that Ontario's current requirements for houses achieve a level of performance that approximates the National Energy Code for Houses.

There is considerable debate about the costs and benefits of some of these energy conservation standards, making it hard to quantify potential emission reductions or their costs in Ontario.

Who has recommended tougher building codes?

The International Panel on Climate Change says that "greater use of available, cost-effective technologies to increase energy efficiency in buildings could lead to sharp reductions in emissions of CO_2 and other gases contributing to climate change." They explain that market forces and consumer choice will not achieve greater efficiency for a number of reasons. For example, landlords and builders have little incentive to invest in energy efficiency because they do not pay the energy bills. People buying houses try to minimize capital costs and often do not consider operating or societal costs. The IPCC report describes regulating building codes as one promising policy option to increase the energy efficiency of buildings.

1 R-2000 is a standard for very energy efficient homes, currently promoted by Natural Resources Canada as a voluntary standard. R-2000 homes cost 2 to 6 per cent more than a conventional home, but the homeowner saves that much money in 15-20 years of lower energy bills. Since the program was introduced in the 1980s, only 7,000 buildings have been built under the certification program. Fewer than 1 per cent of new homes built in Canada in 1995 met the R-2000 standard.

Some environmental and energy policy groups have specifically recommended that Ontario should require the R-2000 standard for new residential homes and the ASHRAE 90.1[2] code for commercial buildings.

Where and how are they used in other jurisdictions?

The IPCC reported that "an increasing number of countries are requiring minimum levels of energy efficiency in new construction. As of 1992, at least 30 countries had some type of building energy code." And as of November 1998, most U.S. states had building energy codes equivalent to ASHRAE 90.1, and many exceed it, such as California, Maine, Maryland, Massachusetts, Illinois, Pennsylvania, Washington and states bordering Ontario, such as Ohio and Minnesota. Many other countries also have stringent building codes, for example, Denmark, France, Germany, the UK and Sweden. Sweden, in fact, has the most advanced building codes. In France, successive building codes in the residential sector alone have generated 75 per cent of the total energy savings over the past 20 years. A 1991 study by the National Academy of Sciences ranked building codes first as the most cost-efficient and potentially the most effective technical method of reducing CO_2 in the U.S.

Current Status in Ontario

The provincial government has the jurisdiction to set standards for new construction, embodied in the *Building Code Act*, passed in 1974, and the Ontario Building Code (OBC), first established by regulation in 1975. The Building Code was amended in 1990 to include energy conservation measures, and expanded substantially in 1993 to include more energy conservation requirements, such as full-height basement insulation and ASHRAE 90.1. In fact, Ontario was the first province in Canada to adopt full-height basement insulation and ASHRAE 90.1. With those amendments, the Ontario Building Code was considered one of the most progressive building codes in the world.

In 1996 the Ministry of Municipal Affairs and Housing changed its policy on the need for energy efficiency measures to guide development of the 1997 Ontario Building Code. Responding to calls from large home builders and municipalities to reduce the costs of development, the ministry adopted new principles for the OBC to "return it to its original focus on health, safety and accessibility."

All energy conservation requirements in the code were examined for their cost effectiveness, and it was determined that full-height basement insulation and other energy efficiency measures were not cost-effective. For purely financial reasons then, the ministry began to remove energy efficiency measures from the OBC.

2 In North America, standards are written by multi-stakeholder committees and organizations such as the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE). ASHRAE 90.1, developed in 1989, is a common standard for commercial and high-rise residential buildings. It sets minimum performance standards for building envelopes, heating, ventilation, air conditioning and lighting. It has been adopted as a mandatory standard by most U.S. states.

In August 1996, in order to kickstart the housing construction industry, the government passed an amendment to the Building Code, without following the OBC consultation requirements, removing provisions for "full-height basement insulation" and "drainage layers." In September 1996, MMAH released a comprehensive consultation package to over 2000 stakeholders, requesting comments on proposals for amendments to the Building Code. In the amendments, the ministry proposed removing various energy efficiency measures from the code, and promoting them through non-regulatory means, such as a mandatory labelling program. For example, the ministry proposed replacing the requirement that commercial buildings be designed to ASHRAE 90.1 with the requirement that they be labelled to indicate whether or not they are designed to a standard. In addition, minimum insulation levels in new homes would be reduced by 33 per cent, roughly the levels required in 1975.

MMAH said that removing energy efficiency provisions would cut construction costs and make new homes more affordable. The Canadian Energy Efficiency Alliance (CEEA), comprised of environmental groups, consumer groups, Ontario Hydro and natural gas companies, countered that builders would not pass on construction savings to buyers, and that the increased heating costs would end up costing far more in the long run. In addition, the Alliance estimated that the proposed reduced insulation standards for houses could increase emissions by 25 per cent, producing 75,000 tonnes a year of carbon dioxide and other greenhouse gases. Similar concerns about the changes were raised by many other organizations and stakeholders, including the Canada Mortgage and Housing Corporation and Natural Resources Canada.

The changes weakening the energy conservation measures ended up being much less drastic than originally proposed by the ministry because of effective lobbying by CEEA and other parties. The ministry established technical review committees involving all stakeholders to resolve their concerns, then accepted the compromise reached by the Ontario Home Builders Association and CEEA. The effect of stakeholder participation on the final decision of the ministry illustrates the need for such comprehensive public consultation programs. The revisions to the OBC were approved in November 1997, and took effect in March 1998. The requirement that commercial buildings be designed to a minimum level of energy efficiency was retained, but it was made more flexible by recognizing the new federal Model National Energy Code for Buildings 1997 as an alternative to ASHRAE 90.1-1989.

Insulation requirements for gas- and oil-heated houses in southern Ontario were weakened, but by much less than originally proposed. MMAH says that the effect of the change to houses in southern Ontario was to reduce construction costs by approximately $200, while energy costs are expected to rise in the range of $30 to $45 per year. After the 1996 and 1997 amendments to the OBC, Ontario's standards are lower than they were, but are still comparable to the new federal Model Energy Code for Houses 1997, higher than in provinces like Saskatchewan that have no building code standards, and lower than those of Manitoba and Quebec. Ontario's standards are lower than those of most U.S. states, but MMAH maintains that our standards are reasonably cost-effective for our climate. As of November 1998, Ohio and Minnestota, states bordering Ontario, have higher standards. Michigan has lowered its standards, and New York State is currently

considering higher standards. MMAH maintains that Ontario's standards are comparable to those of Manitoba, Quebec and most U.S. states "when the differences in climate are considered," but does not explain how the ministry came to this conclusion.

The R-2000 standard developed in Canada is considered to be about 25 per cent more energy efficient than the Ontario Building Code. The province currently has no programs or initiatives to encourage builders to use the R-2000 program, although one staff person from the Ministry of Energy, Science and Technology is a technical advisor on the R-2000 Council. CEEA is being funded by the federal government and several energy companies to promote the R-2000 program, but Ontario is not participating nor providing funding.

The National Climate Change process (see p. 52) includes an Issues Table on buildings, but again representatives from Ontario are not sitting at that table. Moreover, MMAH currently has no plans to strengthen the OBC as a means of addressing climate change. In fact, the future is expected to move us in the opposite direction. A new federal-provincial approach to building codes will mean substantial changes to the *Building Code Act* and its regulations. The national model building codes are going to be transformed into "objective-based" codes instead of the current "performance-based" codes. It is difficult to predict the effect on Ontario's Building Code program, but MMAH staff say that implementation of this approach will require amendment of the *Building Code Act* and major changes to the OBC to make it more flexible.

Instead of strengthening the energy efficiency provisions of the Ontario Building Code to help meet its commitment to reduce greenhouse-gas emissions, as recommended by many eminent bodies in Ontario and world-wide, Ontario has weakened them in the past three years. And the trend is expected to continue, increasing future CO_2 emissions from heating and cooling of new residential and commercial buildings.

Climate Change: Energy Efficiency Standards

How energy efficiency standards work in theory

Many governments set minimum energy efficiency standards for new appliances and equipment, from refrigerators to industrial motors. Energy efficient appliances and equipment use less energy, reducing emissions of greenhouse gases. The demand for new sources of energy is also reduced, especially since many household appliances are used during periods of peak demand. Customers save money in energy costs.

Some experts estimate that improved energy efficiency standards could result in significant reductions in CO_2 emissions. Many gains have already been made in Canada. The average energy efficiency of new household appliances in this country improved between 1990 and 1996 by about 20 per cent for clothes washers and dryers and between 30 and 40 per cent for refrigerators, freezers and dishwashers. Natural Resources Canada (NRC) says that most household equipment has a lifespan of less than 20 years, so by 2010 most appliances and equipment will be new and more energy efficient.

On the commercial and industrial side, auxiliary motors, auxiliary equipment and lighting account for more

than 30 per cent of commercial energy use. NRC estimates that new 1996 lighting regulations alone will result in an annual net reduction in CO_2 of 5.3 megatonnes by the year 2000 — equivalent to the annual CO_2 emissions of one million cars.

The Ministry of Energy, Science and Technology estimates that the 1998 regulation of fluorescent lamps will result in energy savings in Ontario (to January 2001) of 210,000 MWh, and emissions reductions of 43,000 tonnes of CO_2, 300 tonnes of SO_2, and 80 tonnes of NO_X.

Who has recommended improved energy efficiency standards?

Many respected bodies at the international, national and provincial levels have recommended improved energy efficiency standards as an important tool in reducing CO_2 emissions. For example, the International Energy Agency, which is linked to the Organisation for Economic Co-operation and Development, which Canada has been a member of since 1976, said in 1998 that "reducing energy demand of equipment, particularly electrical appliances, by up to 50% and in some cases even more, has proven to be technically feasible and cost effective." The Worldwatch Institute says that the compact fluorescent light bulb is one of the most effective technologies for raising energy efficiency.

The Ontario CO_2 Collaborative made several recommendations for achieving further CO_2 emission reductions under the Ontario *Energy Efficiency Act* (*EEA*) in 1996, including: raise the profile of the Act; expand the scope of the Act to regulate more products; increase standards for currently regulated products; and expand ministry staff and budgets to enforce the Act.

Where and how are they used in other jurisdictions?

Many countries have set minimum energy efficiency standards in law: the United States, Switzerland, Canada, the European Union, Russia, China, South Korea, Mexico and the Phillippines. There is even a joint U.S.-Canada minimum appliance energy efficiency standards agreement.

Since 1978 the U.S. has established criteria for more than 20 appliances, tripling the efficiency of refrigerators, for instance. The U.S. standards are projected to yield $56 billion in energy cost savings between 1990 and 2015. Ambitious new refrigerator and air conditioner standards were enacted in 1997.

Current Status in Ontario

Ontario's energy efficiency standards are inextricably linked to U.S. and Canadian federal standards, because products manufactured anywhere in North America need to meet the standards of the other jurisdictions in order to be sold across provincial or international borders.

For many years, Ontario was the leader in setting energy efficiency standards in Canada and, some would say, in North America, first establishing energy efficiency standards in 1988. However, today, instead of leading

in the development of new standards, Ontario, because of budget constraints, is having to follow the lead of other jurisdictions. Moreover, the length of time it takes Ontario to regulate products after they have been regulated in the U.S. is increasing. For example, room heaters and wall furnaces have been regulated in the U.S. since 1990; they were regulated in Ontario in 1998. Fluorescent lamps were regulated in the U.S. in 1992 and in Canada in 1996, but not in Ontario until 1998. New refrigerator and air conditioner standards were introduced in the U.S. in 1997; Ontario has not yet introduced new standards to catch up.

Ontario creates standards for products and appliances by regulation under the *Energy Efficiency Act*. As of November 1998, 43 residential and commercial appliances were covered under the Act, with standards pending for at least another six products. The *EEA* was administered by the Ministry of Energy from 1987 until that ministry was merged with Environment in 1993. It was then transferred to the new Ministry of Energy, Science and Technology in 1997.

The provincial government strengthened its regulation under the *EEA* in 1993, 1995 and 1998. MEST says the 1998 amendments to the regulation will improve the energy efficiency of wall furnaces and space heaters by about 5 per cent, and of fluorescent lamps by about 10 per cent. Because the *EEA* is a prescribed Act under the *EBR*, the proposals to amend the energy efficiency regulation were posted on the Environmental Registry. Those amendments increased the number of products covered by the regulation from 30 to 43.

It is important to note that the 1998 amendments to the *EEA's* energy efficiency regulation were first proposed in 1996, and then delayed until 1998, because they were re-evaluated in the ministry-wide regulatory reform initiative (see p. 148). The 1998 amendment, which added three new products already regulated in the United States and Canada (gas-fired room heaters, wall furnaces and fluorescent lamps), was one of the very few regulations the Ministry of the Environment strengthened during its regulatory reform project, stating that efficiency standards "ensure consumer protection, reduce energy costs and minimize the environmental problems associated with energy production, such as air pollution, greenhouse gases and global warming."

The current Ontario government has endorsed the use of energy efficiency standards to reduce greenhouse gases, stating that they improve the province's competitive standing and reduce consumers' energy costs. However, the pace of reform has slowed considerably because staff and budget assigned to the program have declined. At its peak, under the Ministry of Energy in the early 1990s, the program had three full-time staff dedicated to the energy efficiency program, two working on developing standards and one tracking or auditing the program. The program also had sufficient budget to develop new standards. Under the Ministry of Environment and Energy in the mid-1990s, two staff were dedicated full-time, with an operating budget of $195,000 for developing standards and auditing compliance. By 1997, staff had been reduced to one, and the operating budget was cut to $25,000 a year. The government cancelled all transfer payments, which meant that the energy efficiency program could no longer provide funding for the Canadian Standards Association (CSA) to develop standards, test criteria and chair committees. The CSA program is still in place, led now by the federal government, and Ontario has one staff person sitting on the technical committees

which are participating in the development of national standards. But there is no funding in Ontario to develop new standards. The $25,000 annual budget is used to contract the CSA to conduct a few audits of regulated products every year, but it is clear that the recommendation by the Ontario CO_2 Collaborative to improve enforcement has not been acted upon.

Ontario's energy efficiency program has also been weakened because industries have been given several time extensions to implement new standards. Until 1996 the *EEA* applied mostly to residential appliances such as water heaters, furnaces, air conditioners, commercial lighting and small electric motors. New regulations in 1993 and 1995 added several types of industrial sector equipment such as commercial refrigeration chillers, transformers and one- to 15-horsepower electric motors used in air conditioners. In July 1996, MOE proposed delaying compliance dates for some of these products, at the request of industry associations. Consequently, the changes were not approved until 1998, meaning that some standards that were supposed to take effect in 1996 had not been implemented by the end of 1998. MEST says the delays were needed to allow companies time to change their manufacturing processes, and to harmonize with U.S. and Canadian federal regulations.

MEST's 1998-1999 Business Plan has a goal for energy efficiency: to achieve a 1 per cent per annum improvement in Ontario's energy efficiency, measured as energy use per unit of economic output, and energy and dollars saved by consumers through improved energy efficiency of regulated products. MEST wants to achieve annual savings of $230 million by the year 2000. The ministry will use data from industry associations to track the number of products sold, then will calculate energy use and CO_2 reductions. This progress will be reported annually as part of the new ministry business planning process.

Currently, the province has no plans to revisit that goal for energy efficiency, or to accelerate the pace of energy efficiency reforms to address climate change. At the current time, the ministry has neither the staff nor the budget to be a leader in this regard, but will continue to follow the lead of the U.S. and Canada in setting new standards.

Climate Change: Carbon Tax

How carbon tax programs work in theory

Research by the International Energy Agency indicates that in countries with higher fuel prices, use of energy is much lower. A carbon tax relies on this principle to reduce greenhouse gases.

A carbon tax is levied on fuels (i.e., oils, coal, natural gas, liquid petroleum gas and gasoline) that add carbon to the atmosphere when they are burned. The tax varies in direct proportion to the average carbon content of the fossil fuel (e.g., if the carbon tax for natural gas is $1 per gigajoule, it would be $1.30 for oil and $1.95 for coal). In this way, the relative price of a type of fuel reflects the degree of its environmental harm.

Many of the advocates of carbon taxes also recommend a tax cut in other areas such as income tax as part of the policy. Organizations such as Worldwatch Institute and the Organisation of Economic Co-operation and Development (OECD) have recommended decreasing taxes on wages or on income. In this way, taxes are shifted from desirable behaviour to undesirable behaviour.

According to research done by Standard and Poor's (S&P) for the federal government in November 1997, a carbon tax could lead to higher growth of the economy in the long run. S&P used their macroeconomic model to test the impact of a carbon tax set at a level that would stabilize emissions at 1990 levels by the year 2010. The application of the tax was coupled with a lowering of other taxes to make the policy revenue neutral. According to S&P's model, the economy would grow at a lower rate between the years 2000 and 2010 with the tax than without the tax but would grow at a higher rate after 2010 with the tax. Household spending would drive the economic growth after 2010 because of higher disposable income from cuts to direct personal taxes. On a sectoral basis, the growth rates for petroleum and coal, nonmetal mining, chemicals, and utilities other than electrical power would decline, while rates for the services sector, food, beverage and tobacco, and transportation equipment sectors would increase.

According to a survey of five economic models done by the Energy Modeling Forum at Stanford University, and reported by Worldwatch Institute, if the price of carbon emissions started at $22.50 per tonne and gradually climbed over 50 years to $250 a tonne, the growth of global emissions would roughly stabilize through the middle of the 21st century and growth would nearly halt by 2100. A $250 per tonne tax would add 18¢ to the pump price of a litre of gasoline if the tax were fully passed on to consumers. It would double the price of natural gas, and increase that of coal sixfold. Meanwhile, the prices for wind, solar, geothermal, and biomass energy sources would change insignificantly. Overall, the carbon tax would probably squeeze coal out of the global energy economy, encourage efficient use of gas and oil, and stoke demand for renewable energy sources.

Who has recommended it?

Carbon taxes have been recommended by economists since the early 1990s as the most efficient approach to controlling CO_2 emissions. More recently a number of organizations, ranging from national and regional groups to international groups have supported the policy of a carbon tax to increase energy prices.

National and provincial governments are currently studying carbon taxes as one of the options for reducing GHGs as part of the process to find methods to meet Canada's Kyoto commitments.

Where and how is it used in other jurisdictions?

Five countries — Denmark, Finland, the Netherlands, Norway and Sweden — have introduced taxes on emissions of carbon dioxide from burning coal, oil and natural gas.

Results from these taxes have been positive. The Dutch tax, which exempts renewable energy, is cutting carbon emissions 2 per cent annually. Sweden's levy has increased biomass use, mainly for cogeneration, by 71 per cent. In Norway, where good alternatives to fossil fuel use exist, the tax has contributed to carbon reductions of up to 21 per cent per year and by 2 to 3 per cent per year from household motor vehicles.

Carbon/Energy Taxes, 1997

Country	Date Introduced (price per ton of carbon)	Current Rate	Exemptions
Finland	1990	$1.90	Industrial raw materials and overseas transport fuels
Norway	1991	$4.60-15.30	Onshore natural gas use and fuels for fishing, air and freight transport
Sweden	1991	$13.10 $6.50 for industry	Electricity and some biomass use
Netherlands	1992	$1.20-1.60	Large-scale natural gas use and renewable energy
Denmark	1996	$2.10-24.30 $1-3.70 for industry	Electricity use

Source: Richard Baron, Economic Fiscal Instruments: Taxation, Working Paper 3, Annex 1, Expert Group on the UN Framework Convention on Climate change (Paris: July 1996)

Current Status in Ontario

Ontario does have the jurisdiction to levy energy/carbon taxes and currently taxes energy in specific areas.

Under the *Fuel Tax Act*, administered by the Minister of Finance, Ontario levies specific taxes on fuels used for transportation. Gasoline tax is levied on gasoline, propane and all fuels used to power aircraft. Tax rates are as follows:

Gasoline	14.7 cents per litre
Propane	4.3 cents per litre
Diesel	14.3 cents per litre
Aircraft fuel tax	2.7 cents per litre
Locomotive fuel tax	4.5 cents per litre

GST is applied to electricity and natural gas.

However, even with the current tax in place, data from a survey by the Ministry of Energy, Science and Technology show that gasoline prices are lower in Toronto in 1998 than they were 10 years ago.

Cautions

While Ontario has the jurisdiction to levy a carbon tax on energy, there are a number of implementation issues that could act as large barriers. These include:

Trade and competitiveness

According to the OECD, the main reason a European Union carbon/energy tax was not adopted was strong opposition from industrial sectors, based on arguments concerning competitiveness. Member states did not want to apply a tax that would increase costs so long as the EU's principal competitors were not applying similar measures. The Ontario government could face similar opposition in light of the fact that Ontario's economy has a number of large energy-intensive sectors which compete internationally.

Distributional impact of the tax

Empirical research published in *Canadian Public Policy* indicates that regressive distributional effects are likely to occur for energy-related taxes. In other words, people in lower income groups would have to use a higher proportion of their income to pay for the tax than people in higher income groups. This works against the principle that taxes should be paid by those who are best able to pay them — one of the fundamental principles of fair taxation.

A key issue concerns the incidence of the tax, i.e., which sector of society eventually pays the tax — the owners of energy resources or the energy consumers? The extent to which the tax is passed on in prices to consumers will depend on the international context in which the tax is introduced. If other countries implement similar measures, it is more likely that some of the burden of the tax will be paid by the owners of energy resources, rather than by energy consumers.

Inflation

It is sometimes asserted that a carbon tax would increase general price levels. This could in turn result in higher wage claims and further price increases later on.

Further Readings on Climate Change and Renewable Energy

Publications:

A CO_2 Strategy for Ontario: A Discussion Paper, Report of the Ontario CO_2 Collaborative (September 1996).

A Framework for Competition, Report of the Advisory Committee on Competition in Ontario's Electricity System to the Ontario Minister of Environment and Energy (May 1996).

Canadian Solutions: Practical and Affordable Steps to Fight Climate Change, David Suzuki Foundation and the Pembina Institute (October 1998).

Carbon Dioxide Reduction Options for Ontario: A Discussion Paper, Canadian Institute for Environmental Law and Policy (August 1994).

Climate Change 1995: Impacts, Adaptations and Mitigation of Climate Change: Scientific Technical Analyses, Contributions of Working Group II to the Second Assessment Report of the Intergovernmental Panel on Climate Change (1996).

Emissions Reduction Study for the Ontario Clean Air Alliance, Diener Consulting Inc. in Association with Acres International (November 1998).

Environmental Protection in a Competitive Electricity Market in Ontario: Analysis of Environmental Policy Options, Pollution Probe and the Institute for Environmental Studies, University of Toronto, (August 1998).

Environmental Taxes and Green Reform, Organisation for Economic Co-operation and Development - OECD, (1996).

Fourth and Final Report: Chapter Seven Environmental Protection, Ontario Market Design Committee (January 1999).

Getting the Signals Right: Tax Reform to Protect the Environment and Economy, David Roodman, Worldwatch Paper 134 (May 1997).

Global Warming: Economics of a Carbon Tax, S. Barrett in D. Pearce (editor), Blueprint 2: Greening the World Economy, Earthscan (1991).

Green Budget Reform: An International Casebook of Leading Practices, R. Gale and S. Barg Editors (1995).

Meeting the Challenge of Climate Change: 1996 Update on Initiatives in Ontario to Reduce Greenhouse Gas Emissions, Ministry of Environment and Energy (December 1996).

Second Interim Report: Chapter Five Environment, Ontario Market Design Committee (June 1998).

State of Energy Efficiency in Canada 1998: First Annual Report of the OEE - Office of Energy Efficiency, Natural Resources Canada (1998).

State of the World 1998: A Worldwatch Institute Report on Progress Towards a Sustainable Society, Worldwatch Institute (1998).

The Canada Country Study: Climate Impacts and Adaptation Ontario Summary, Environment Canada (1997).

Transportation and Energy: Strategies for a Sustainable Transportation System, D. Sperling and S. Shaheen Editors, American Council for an Energy-Efficient Economy (1995).

Trends in Canada's Greenhouse Gas Emissions 1990-1995; Environment Canada (April 1997).

1997 Progress Report: Towards Sustainable Development; Ontario Hydro (1997).

Web Sites:

Note: Information on Web sites is regularly modified and updated. This information was current as of February 10, 1999. The following web sites contain a wide range of information on climate change and renewable energy initiatives.

Canadian Association for Renewable Energy, <**www.renewables.ca**>

Canadian Wind Energy Association, <**www.canwea.ca**>

Centre for Renewable Energy and Sustainable Technology, <**www.crest.org**>

Danish Wind Turbine Manufacturers' Association, <**www.windpower.dk**>

David Suzuki Foundation, <**www.davidsuzuki.org**>

Energy Efficiency and Renewable Energy Network, <**www.eren.doe.gov**>

Energy Information Administration, <**www.eia.doe.gov**>

Greenpeace Canada, <**www.greenpeacecanada.org**>

Independent Power Producers' Society of Ontario, <**www.newenergy.org**>

International Council for Local Environmental Initiatives, <**www.iclei.org**>

International Energy Agency, <**www.iea.org**>

Kortwright Centre for Conservation, <**www.kortright.org**>

Ministry of Energy, Science and Technology, <**www.est.gov.on.ca**>

National Climate Change Secretariat, <**www.nccp.ca**>

Natural Resources Canada, <**www.es.nrcan.gc.ca**>

Ontario Energy Board, <**www.oeb.gov.on.ca**>

Ontario Market Design Committee, <**www.omdc.org**>

Solar Energy Industries Association, <**www.seia.org**>

Solar Energy Society of Canada, <**www.newenergy.org**>

Worldwatch Institute, <**www.worldwatch.org**>

Urban Sustainability

The ECO's review of urban sustainability highlights the interconnectedness of environmental policy. This is one of the central themes of the EBR: that environmental outcomes are determined by decisions made across a broad range of ministries. The ECO looked especially at the policies and priorities of the Ministry of Municipal Affairs and Housing and the Ministry of Transportation regarding land use planning and public transportation — and at the connection these ministries should have with the efforts of the Ministry of the Environment to control vehicle emissions.

The ECO found that the Ontario government does not have mechanisms in place to ensure that land use policies that protect the province's environment are being applied. Similarly, the ECO could find no provincial ministry that would accept responsibility for ensuring that Ontario municipalities have the resources, the administrative framework, and the capabilities to plan for local, regional or province-wide public transit.

The ECO's review also looked at some of the economic tools that could be used to deal with Ontario's urban development and transportation problems, and at the role provincial ministries could play to accomplish better land use through the use of development charges and brownfield redevelopment.

Urban Sustainability: Introduction

Ontario faces urgent environmental and economic problems because of our excessive dependence on the automobile, which brings along with it high levels of air pollution and increasing emissions of greenhouse gases. One of the most significant obstacles to using other forms of transportation — walking, cycling, and public transit — is the sprawling development pattern of Ontario communities.

Despite the recognition of these problems, newly urbanized areas, for the most part, continue to be developed in auto-oriented patterns that reinforce the dependence on automobiles — and that continue to increase pollution. Sprawling development also uses up vast amounts of precious agricultural and environmentally sensitive lands. In fact, between one-third and one-half of urban lands in Ontario are used for roads, garages and parking.

The purposes of the *EBR* include protecting the integrity of the environment and protecting the right of Ontarians to a healthful environment. If these goals are to be met, the environmental impacts caused by

urban sprawl need to be addressed. Several ministries, including the Ministries of the Environment, Transportation, Natural Resources, and Municipal Affairs and Housing, have recognized the environmental problems created by urban sprawl. These ministries have made commitments in their Statements of Environmental Values and in provincial policies to promote public transit and compact land use, and to protect agricultural and natural lands.

HIGHER DENSITIES AND INCREASED USE OF PUBLIC TRANSIT

Research on transportation patterns in cities around the world shows that gasoline usage decreases substantially with increased densities, and that increased densities are positively related to increases in the use of public transit. Densities of about 4,000 people per square kilometre are required to make transit effective and well-used, and at densities around 6,000 people per square kilometre, rapid transit systems begin to pay for themselves. Densities in these ranges can be found in the cores of Ontario cities. For example, the overall density of the pre-amalgamated City of Toronto is 6,500. New housing developments built since WWII, however, typically are much less dense, with densities of about 2,500 found in the suburban municipalities of the Greater Toronto Area.

Sprawl and transportation

Since WWII, urban areas in Ontario have typically developed in a sprawling manner, with population densities less than half those of older, more compact urban areas. Different types of land uses are usually segregated from one another and located in large single-use tracts of land — industry in industrial parks, stores in shopping malls, houses in residential subdivisions — an urban form that encourages dependence on the automobile. When everyday destinations such as work, home, shopping, and schools are located in dispersed areas far apart from one another, they cannot easily be reached by walking or cycling or by a single transit trip.

Providing efficient public transit is very difficult in these areas. The long travel distances and dispersed destinations increase travel time on transit routes, making public transit uneconomical to provide and inconvenient to use. Because of the high costs of operating transit systems in areas of low density, municipalities often provide only infrequent service, which further decreases the convenience of transit, resulting in still more reductions in ridership.

What are the costs of urban sprawl to Ontarians?

Environmental costs

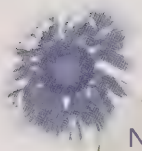
Road vehicles are the number one source of smog-causing pollution in Ontario, where the transportation sector accounts for more than half of the province's NO_x and CO emissions and approximately 30 per cent of VOCs, and is a major source of inhalable particulate matter. In 1995, the transportation sector contributed approximately 30 per cent of Ontario's CO_2 emissions.

Car manufacturers have made advances in fuel efficiency in the last two decades, but increases in vehicle numbers and use, and increasing sales of larger, less fuel-efficient vehicles such as minivans and sport utility vehicles mean that overall emissions from the transportation sector continue to rise. Canada, in fact, has the second highest per capita use of fossil fuels for transportation in the world; per capita use is higher only in the United States. Moreover, estimates suggest that the energy requirements of Ontario's transportation sector will rise by 43 per cent between 1990 and 2015.

Loss of agricultural land

Low density development patterns require large amounts of land. Often it is agricultural land that is being "consumed" to accommodate sprawling new development. In Canada, the conversion of agricultural land to residential and industrial land is an important issue, since only 5 per cent of Canada's vast land area has high agricultural potential. Most of Ontario's prime agricultural land is located in the highly populated area of southern Ontario, where much of it is under pressure for development. Conversion of this land removes it from agricultural production forever. Significant natural areas such as woodlots, wetlands and ravines also make up a portion of the land taken up by sprawling urban development.

Containing urban sprawl would reduce the land needed for urban purposes, so that natural areas and agricultural lands would be under less pressure for development.



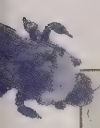
NUMBER OF "BAD AIR" DAYS DURING SUMMER 1998

MOE issued air quality advisories for southern Ontario on eight days during the spring and summer of 1998 (two days in May, two days in June, and four days in July). There were fewer "bad air days" in 1997 (six days) and 1996 (four days), but more in 1995 (11 days). MOE issues air quality advisories when elevated levels of ground level ozone are forecast during the summer months. Ozone levels are considered "elevated" when average ozone concentrations exceed 80 parts per billion for one hour or more over a large geographical area.

Economic costs

Sprawling development also has significant economic costs. The health effects caused by transportation-related air pollution impose significant costs on the health care system. A report by the Canadian Council of Ministers of the Environment estimated that regulatory initiatives to reduce emissions of smog-related pollutants could save $11 billion to $38 billion in expenditures on the health care needed to mitigate the serious health effects caused by smog between 1997 and 2020. Seventy-three per cent of this reduction in costs would be realized in the Windsor-Quebec City corridor alone.

Studies also show that it is very expensive to build and maintain the extensive infrastructure, such as sewers and roads, required to service sprawling development. A 1995 report for the Greater Toronto Area Task Force estimated that adopting a more compact development pattern in the GTA could save $500 million annually in infrastructure costs over the next 25 years. If reductions in the costs related to air pollution, health care, and lower traffic congestion are also factored in, the annual savings are estimated at $1 billion. A 1997 study of 37 world cities, moreover, showed that cities with more balanced transportation systems are doing better economically than those that are more auto-dependent, where traffic congestion is undermining economic productivity.



VEHICLE EMISSIONS: WHAT ARE THEY?

Vehicle Emissions Contribute to Smog:

VOCs - volatile organic compounds

NO_X - nitrogen oxides

NO_X and VOCs combine in the presence of sunlight to form ground-level ozone. Ozone reduces lung function, and studies have shown that hospital admissions for respiratory problems increase when ground level ozone levels are high. Repeated exposure to high levels of ozone may cause permanent lung damage. Ozone also causes damage to vegetation.

Particulate matter

Particulate matter is made up of fine particles suspended in the air. Particles less than 10 microns in diameter are referred to as *inhalable particulates* because they are small enough to be easily inhaled into the lungs. The smallest inhalable particulates (those less than 2.5 microns in diameter) are called *respirable particulates* and can travel to the deepest part of the respiratory tract when inhaled. MOE estimates that current levels of inhalable particulates are associated with 1,800 premature deaths and 1,400 cardiac and respiratory hospital admissions in Ontario every year.

Vehicle Emissions Contribute to Climate Change:

CO_2

Carbon dioxide is a byproduct of fuel combustion and is the most important greenhouse gas.

What can be done?

Much work has been done in Ontario and in Canada to study what can be done to move toward more environmentally sustainable land use and transportation patterns. The research suggests that the problem is complex, and that solutions will require action by citizens and by all levels of government. No one initiative will solve the problem. Governments need to promote the development of more compact, transit-supportive, mixed land uses, and they need to encourage residents to use alternatives to the private car such as public transit, cycling and walking. An integrated mix of legal and policy tools, including transportation and land use planning, economic instruments and educational measures, are needed to accomplish change. Although many of the decisions on development patterns, infrastructure and land use are made at the local level, there are still many tools available to provincial ministries. They can play an important role in implementing or encouraging integrated policy initiatives.

The *EBR* specifically requires that Ontario ministries integrate environmental considerations with social, economic, and scientific considerations. It promotes the principles of sustainability by encouraging integrated decision-making across previously fragmented sectors and jurisdictions and areas of environmental concern. In my 1997 annual report, however, I found that other ministries failed to support the Ministry of the Environment's initiatives to reduce smog.

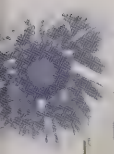
In the following review of Ontario's laws and policies on urban sustainability, I examine both actions that should be taken by individual ministries, and those that require a coordinated and integrated approach across ministries. I have reviewed Ontario's land use and transportation planning system, the ministries' commitments in their Statements of Environmental Values, and other ministry commitments to promote compact land use, improve air quality and reduce greenhouse gas emissions.

Urban Sustainability: Land Use Planning

Land use planning involves making decisions about how land should be used — where, when, and at what population densities. Land use planning is the central factor in determining whether land development patterns support public transit and other less polluting and more sustainable transportation options.

The province's reduced role in land use planning approvals

Changes to the *Planning Act* made in 1994 and 1996 have devolved a substantial portion of the province's land use planning authority from the Ministry of Municipal Affairs and Housing to municipalities. Before these changes were made, provincial approval was required for most municipal planning decisions. However, in an effort to streamline the land use planning process, the Ontario government decided that less provincial oversight was necessary.



PLAN TO DEVOLVE PLANNING POWERS NOT POSTED ON THE REGISTRY

In December 1997, MMAH released its implementation plan for devolving approval powers under the *Planning Act* to municipalities. MMAH did not post this plan on the Environmental Registry, even though the ministry acknowledges its environmental significance, noting in the plan that "this approach [to exemption] reflects the need to protect the broader provincial and regional interests and to protect as well such things as infrastructure and sensitive environmental resources across municipal boundaries." In response to the ECO's inquiry, MMAH indicated that the strategy was not posted because it is "administrative and operational in nature" and "not considered a new government initiative but rather a process to facilitate the government's position of enhancing local planning autonomy and to implement the exemption provisions of the amended *Planning Act.*" The ECO believes that this policy was environmentally significant and should have been posted on the Registry.

To date, MMAH has exempted many municipalities — containing 80 per cent of Ontario's population — from the need to get provincial approval for amending their official plans. (An official plan outlines the types of development that are allowed in various parts of the municipality, and when the development should occur.) By the time the ministry has completed its current devolution plan, fully 96 per cent of the province, by population, will be exempt. This also means that many official plans and official plan amendments that would have been subject to public input and comment through the Environmental Registry will not be posted.

HOW DEVOLUTION WORKS

Here is an illustration of what MMAH's devolution of planning powers mean, using York Region as an example. In York, **official plans** of lower-tier municipalities (such as Markham and Richmond Hill) are now being approved by York Region (the upper-tier government). Lower-tier plans must be consistent with York Region's official plan. York Region also has the authority to approve any **amendments** to the lower-tier official plans. As a result, none of the lower-tier **official plans** or **official plan amendments** require provincial approval. In addition, MMAH has also **exempted** York from the requirement to have amendments to its (regional) official plan approved by the province. The end result is that in York Region, the only planning activity that would require provincial approval would be an entirely new official plan for the Region. The situation described here is the same in all regional municipalities, and in many counties.

Municipalities are still required to "circulate" official plans and official plan amendments to MMAH for ministry review and comment prior to taking them to their own municipal council for approval, and the ministry has the power to appeal municipal planning decisions it believes are inconsistent with provincial policy to the Ontario Municipal Board.

Provincial Policy Statement

The *Planning Act* sets out the provincial role in land use planning. It gives the Minister of Municipal Affairs and Housing the power to issue Provincial Policy Statements (PPS) on matters of provincial interest such as protecting significant environmental features or retaining prime agricultural land. However, in 1996, the government amended the requirement in the *Planning Act* that local planning decisions be "consistent with" provincial policy, and replaced it with the older language requiring that planning authorities "have regard to" the Provincial Policy Statement. This provides municipalities with more latitude in applying the PPS when they make planning decisions for their communities.

MUNICIPAL GOVERNMENT STRUCTURE

Ontario's municipalities can be classified as having either single- or two-tier systems of government. Most communities in the north are single-tier municipalities while those in southern Ontario are part of a two-tier system.

Two-tier structures consist of an upper-tier county (generally in rural areas) and several lower-tier municipalities such as cities, towns, townships and villages. The county is the older and more common form of upper-tier municipality. The regional structure was introduced as a result of local government reform in the late 1960s and early 1970s. (From MMAH, *Municipal Councillor's Manual*, 1992.)

In 1996, MMAH issued a revised Provincial Policy Statement under the *Planning Act.* It still contains some key policies encouraging compact and transit-supportive development, although these have been watered down from the previous Policy Statement. These key policies encourage municipalities to implement land use plans based on:

- cost-effective development patterns
- densities which support the use of public transit, and which use land and resources efficiently
- development standards that are cost-effective and that minimize land consumption and reduce servicing costs
- redevelopment and intensification
- provision of an efficient, cost-effective, multi-modal transportation system

Lack of municipal reporting and provincial monitoring

Many municipalities are now responsible for approving their own planning decisions, and for ensuring that issues of provincial interest in the PPS are addressed when they make planning decisions.

The key role for MMAH will be to monitor whether provincial policies are having their desired effect, and whether municipalities are protecting provincial interests by ensuring their planning decisions do "have regard" to the policies in the Provincial Policy Statement. The ministry will need this monitoring information, since the *Planning Act* requires the ministry to have carried out a review of the effectiveness of the Provincial Policy Statement by May 2001.

In its plan for devolving planning powers, released December 1997, MMAH had originally planned that the regulations exempting municipalities from the need for provincial approvals would require municipalities to submit an evaluation of their planning

Can the Public Influence Decisions?

Bronte Creek Provincial Park

Management Plan Review
Registry # PB7E3002

description Bronte Creek is a small provincial park located in the City of Oakville. The area south of the creek, which bisects the park, already contains picnic areas, parking lots, sports facilities, a working farm and a museum. MNR's proposed changes to the existing Bronte Creek park plan included still more development — an amphitheatre, natural history museum, Ontario Parks store, roofed accommodations, 500-site campground and a welcome centre, possibly housing a conference centre, restaurant, and an IMAX theatre with virtual reality rooms. Part of the new development, including the campground, is being proposed for the undeveloped lands north of the creek.

public comments Many commenters were opposed to the proposed scale of development, to the number of campsites, to plans to build a bridge over Bronte Creek, and to put cabins and permanent tents in an undisturbed woodlot. Other people were concerned about MNR's plans to reduce the nature reserve zoning that protected the creek valley and the adjacent lands. Other commenters wanted the northern part of the park to remain undeveloped.

decision In response to public comments, MNR reduced the size of the park's proposed development zone from 60 per cent of the parklands to 50 per cent, and increased the nature reserve zone from 18 per cent to 25 per cent. The area set aside for natural restoration in the northern part of the park was more than doubled in size, and the proposed campground was reduced from 500 sites to 400. However, MNR did not change plans to build the bridge over the creek, to develop cabins in the woodlot, or to build the welcome centre, amphitheatre, education centre, natural history museum and other new structures.

policies to MMAH each year. MMAH planned to use this information to help it assess the performance of the PPS. However, subsequent to the release of the December 1997 plan, MMAH decided not to require such reports, and the exemption regulations do not include conditions that municipalities report their planning policies to the ministry.

Instead, MMAH decided that it could monitor municipalities' use of the Provincial Policy Statement through the ministry staff reviews of proposed official plans and official plan amendments. However, ministry staff report there are currently no plans to compile staff observations about the official plans, nor are there plans to track this information to provide a provincial overview.

MMAH is continuing to work toward developing indicators that municipalities can use to report on their implementation of the PPS. However, since the reporting on these indicators is entirely voluntary, it is very unlikely that MMAH will be able to use this information, if any, to monitor municipalities' implementation of the policies in the PPS.

Using satellite imagery to monitor environmental trends

MMAH has assembled an interministerial working group which has launched a pilot project with the Ministry of Natural Resources to explore how satellite imagery could be used to track environmental trends related to policies in the Provincial Policy Statement. For example, using satellite imagery, indicators such as the amount of agricultural and forested land in a municipality or the density of new development could be measured and tracked over time. Plans are to complete the pilot project by March 1999, at which time MNR will report on which policies can be measured using satellite imagery.

However, a number of key policies under the Provincial Policy Statement cannot be measured using satellite imagery — such as encouraging the use of alternative development standards to minimize land consumption or encouraging intensification.

ECO Commentary

The *EBR* says that the government of Ontario is responsible for protecting the environment on behalf of the public and that the residents of the province must have the means to determine if the province is doing so. Two years after implementing its new system of land use planning, the Ontario government has made very little progress toward ensuring that the policies that protect the province's environment are being applied. An

adequate system to monitor and report is needed if Ontario is to ensure environmental and economic problems caused by urban sprawl do not multiply and that the air pollution caused by traffic does not continue to claim more lives each year.

Recommendation 15

MMAH should monitor whether policies in the Provincial Policy Statement that encourage the development of more transit supportive, denser, mixed land uses are having their desired effects, report this information, and if these policies are not effective, reconsider the provincial role in planning.

SOME *EBR* APPLICATIONS ON LAND USE PLANNING

Two 1998 *EBR* applications relate to the protection of provincial interests under the Provincial Policy Statement (PPS). One application raised concerns about a composting facility being proposed in close proximity to an airport. The applicants wanted a regulation prohibiting the siting of compost and landfill facilities in close proximity to airports, fearing that birds attracted by the compost would create hazards for aircraft taking off and landing, and that methods of controlling bird populations (insecticides and herbicides) could be harmful to the environment. MMAH responded that a review of the need for such a regulation was not needed because the PPS includes policies that specifically address land use compatibility issues near airports.

MMAH's response did not address the concern of the applicants that these policies are not binding and therefore not adequate, and did not explain whether there are any consequences when municipalities fail to implement these policies. It would have been helpful if MMAH had provided some evidence that binding policies or regulations restricting land use near airports are not necessary — if for example, MMAH monitored municipal planning decisions and found that the vast majority do comply with the cited policies.

Other applicants requested a review of the need for a policy to protect a natural corridor of waterfront land in Pickering. The applicants were concerned about a recent local decision to rezone a piece of waterfront corridor to permit development. MMAH responded that it would not consider developing a new policy because the existing Provincial Policy Statement includes policies to protect significant natural heritage features and areas. The ministry acknowledges, however, that the determination of what is "significant" (and thus should be protected) is left to local discretion. Similarly, MMAH noted that the PPS contains a policy that natural connections between natural features should be maintained or improved, where possible, but again the choice of how to implement this policy is left to local discretion. As in the case above, it would have been helpful if MMAH had been able to show, as a result of monitoring of the PPS, how municipalities are interpreting these policies — what kinds of features they are protecting, and whether they are maintaining natural corridors between natural features.

Urban Sustainability: Public Transit

Public transit is a crucial part of any strategy to reduce the damaging effects of automobile use on environmental health. Although walking and bicycling need to be encouraged wherever practical, public transit is the most significant viable alternative to car use in Ontario's urban areas.

Provincial Involvement in Public Transit

The Ministry of Transportation is responsible for transportation policy and planning in Ontario. Since MTO is phasing out funding for public transit, its ability to influence municipalities regarding public transit is now limited to providing expertise on municipal transportation planning. While the ministry did carry out a project called the GTA Transportation Planning Process during 1998, thus far no reports or studies have been released on the project, and it is not known how much emphasis the project placed on public transit.

The only provincial involvement in public transit is through the Provincial Policy Statement on transportation and transportation corridors under the *Planning Act*, administered by the Ministry of Municipal Affairs and Housing. The Statement says that "transportation systems will be provided which are safe, environmentally sensitive and energy efficient." However, municipalities are required only to "consider" this policy and not required to apply it. MMAH did introduce the *Greater Toronto Services Board Act (GTSBA)* during 1998, but other than this initiative, the ministry did not work on urban transit issues. MMAH's 1998-1999 Business Plan makes no reference to transit issues or transit policy.

Public Transit in Ontario

There are 65 public transit systems in Ontario, all of them delivered at the municipal level, except for two regional systems: Ottawa-Carleton and Hamilton-Wentworth. In addition, GO Transit, operated by the province until the *GTSBA* is proclaimed, provides commuter service to the Greater Toronto Area.

Historically, public transit systems throughout Ontario have been heavily dependent on subsidies from the province. This includes the Toronto Transit Commission (TTC) and GO Transit. Provincial funding for public transit (excluding GO Transit) was capped in 1994 at $450 million for operating and capital costs, representing approximately 50 per cent of the total cost of public transit across the province. Since 1994, the province has gradually withdrawn its subsidies for public transit, and 1998 was the last year that public transit systems in Ontario received any provincial financing for operating costs.

Thus, the '90s has been a decade of downsizing for most community public transit systems across the province. Deteriorating public transit service in many Ontario communities has led to further declines in ridership, and the next few years will likely see many more changes in services as municipalities struggle to cope with their changing budgets and responsibilities. (For further discussion, see the review of MTO's SEV, pp. 20)

ONTARIO'S SMOG PLAN: THE TRANSPORTATION DEMAND MANAGEMENT WORK GROUP

In January 1998, the Ministry of the Environment finalized a Smog Plan, stating that its goal is to reduce emissions of NO_X and VOCs by 45 per cent from 1990 levels by the year 2015. The Smog Plan was developed by workgroups composed of representatives from industry, government and non-government sectors, each of which prepared emission reduction plans.

One of the groups established under the Smog Plan was the Transportation Demand Management (TDM) Work Group, in recognition of the connection between reduced vehicle use and improved air quality. Made up of representatives from industry and public transit, and officials from MOE and other ministries, the TDM group identified a number of initiatives that would reduce automobile use and increase the use of cleaner modes of travel (such as cycling, public transit and walking). They include:

- promoting compact, mixed land uses, including curbing urban sprawl and increasing densities along transit corridors
- implementing user-pay pricing (e.g., toll roads)
- implementing transit priority programs, including High Occupancy Vehicle (HOV) lanes
- maintaining and improving existing public transit services and infrastructure.

However, the TDM Work Group has not met since August 1997, and the Ontario government has not supported any of the initiatives the group identified for curbing urban sprawl and automobile use. In fact, provincial policy during 1998 has gone in the opposite direction.

- For example, Ontario has phased out provincial funding for public transit in the province and is not maintaining and improving existing public transit services and infrastructure.
- As well, MOE staff indicate that the ministry has not worked with the Ministry of Municipal Affairs and Housing on Smog Plan initiatives that would promote compact, mixed land use and curb urban sprawl.
- The TDM Work Group recommended that the Ontario government measure how well transportation demand management initiatives are working and that the results be communicated to the public. But MOE has not yet developed the indicators that would measure progress on these initiatives. Instead, according to MOE staff, during 1998 ministry resources were mainly focussed on the Drive Clean program component of the Smog Plan. (See discussion of the Drive Clean program, pp. 45-47)

ECO Commentary

Last year I recommended that "all ministries, especially MMAH and MTO, should ensure their policies and priorities regarding land use planning and public transportation support MOE's efforts to control vehicle emissions." Currently, there is no concerted effort for participation and cooperation among MOE, MMAH and MTO, and no discernible progress has been made on the Smog Plan's Transportation Demand Management emission reductions.

Recommendation 16

MOE, MTO and MMAH should implement the Transportation Demand Management initiatives outlined in MOE's Smog Plan and develop and report annually on indicators to measure progress toward implementing these measures.

Public Transit in the Greater Toronto Area

The TTC

The Toronto Transit Commission is renowned throughout North America for its popular and well-used system. Compared to other public transit systems in North America, data show that the TTC recovers the highest proportion of operating costs through fares. The TTC also transports large numbers of workers downtown each day during the rush hour, making it one of the premier transit systems on the continent. Problems loom for the TTC, however. The withdrawal of provincial funding will shift the entire financial burden for the TTC to the City of Toronto, which will have to deal with an estimated $230-million-dollar budget shortfall for the TTC in 2001. In addition, under the *GTSBA* funding formula, the City of Toronto will soon be covering 49.9 per cent of the cost of GO Transit. (See next page.)

Ridership on the TTC is down by approximately 16 per cent since it peaked in 1988 at 463.5 million riders. The system has lost riders both from central areas, where there is easy access to subways, buses and streetcars, and from suburban areas, where access to public transit is more limited. Several reasons are often cited for the loss of ridership:

- A restructuring of the economy after the 1990 recession led to jobs moving out of Toronto and into suburban areas not well served by transit.
- As subsidies from the provincial government to public transit providers decreased over the last decade, the TTC has had to increase fares by 70 per cent during the 1990s to make up the shortfall.
- Toronto's aging population translates into fewer residents likely to use transit.

GO Transit

GO Transit is the regional commuter carrier that transports people from neighboring municipalities into the Toronto downtown core. GO is facing the same fiscal challenge as the TTC. GO's provincial funding has been steadily dropping, despite increasing ridership during the past five years, forcing it to cut back service. 1998 was the last year in which the regional carrier received provincial funding ($106 million). In 1999, the shortfall will have to be made up by the municipalities it serves, which now also have sole responsibility for funding their own local transit systems.

The governance of GO Transit will change during 1999, after the proclamation of the *Greater Toronto Services Board Act*, under which the Greater Toronto Transit Authority (GT Transit) will be established. GT Transit will no longer be linked to the Ministry of Transportation, but will be the responsibility of the City of Toronto, the 28 other GTA municipalities, and the Regional Municipality of Hamilton-Wentworth.

Significant challenges face GT Transit and its parent, the Greater Toronto Services Board, when they assume responsibility for coordinating transit in the GTA. Public transit within Toronto is relatively efficient, but one of the greatest challenges the GTSB will face is the lack of a region-wide public transit system, including both rail and bus, that will be able to connect municipalities and the 14 other municipal transit systems within the GTA.

By 2021, the outer regions of the GTA are expected to grow by two million people, and, according to GO staff reports, GO Transit is expecting to add 25 million new passenger trips per year. To accommodate this projected growth, GO should spend $1 billion over the next 20 years on capital expenditures. It is hard to foresee how the municipalities of the GTA will be able to provide such funds.

Public Transit In Smaller Ontario Communities

The impact of provincial downloading of public transit costs to municipalities has been dramatic in Ontario's smaller municipalities. Many communities, like Owen Sound, reluctantly reduced public transit service in 1997 and 1998, and foresee further reductions in the near future. The community of Fort Frances has decided to terminate its public transit service altogether. Brockville, on the verge of closing its transit system, was still running it, at a loss, as of December 1998. Unfortunately, a reduction in public transit service tends to create a downward spiral in ridership, as more people, frustrated by the slow service, turn to their cars or taxis for daily transportation — thus reducing transit ridership and revenues even further.

Some communities have looked for innovative solutions to cope with funding shortfalls — Pembroke, for instance, has turned to private operators, with the hope that these services may be able to keep costs down. Other public transit systems, such as Peterborough's, are turning to the "dial-a-bus" system. Cornwall has reduced the number of buses and drivers during off-peak hours from six to three. Each of these measures points to less service and more discouraged transit users.

ECO Commentary

By making public transit an entirely municipal responsibility, the provincial government is retreating from its responsibility for sustainable transportation and sustainable urban development. In this review of public transit in Ontario, the ECO could find no provincial ministry with the responsibility of ensuring that Ontario municipalities have the resources and the administrative framework and capabilities to plan for regional or province-wide public transit.

The Ministry of the Environment cannot achieve its Smog Plan's air quality objectives for Ontario unless the province reconsiders the role it can play in long-term strategic planning for public transit across the province, in coordinating local transit systems to form a "seamless web" of transportation, and in ensuring that municipalities deliver a minimum level of service to their residents. In order to do this, Ontario requires an integrated effort involving both the Ministry of Transportation and the Ministry of Municipal Affairs and Housing in making Ontario's urban areas more environmentally sustainable.

Recommendation 17

MTO should reconsider the role it can play in supporting public transit across the province, and in encouraging integration of neighbouring local transit systems to support the Provincial Policy Statement.

Urban Sustainability: Pricing Vehicle Use to Improve Environmental Quality

When the *EBR* was proclaimed in 1994, the Ministry of Finance was included as a prescribed ministry and, like other ministries under the *EBR*, was required to develop a Statement of Environmental Values, describing how MOF would integrate environmental considerations whenever it made an environmentally significant decision. However, MOF was removed from the requirements of the *EBR* in 1995, and therefore the ECO no longer has the ability to recommend how that ministry might assist in achieving a healthful environment for the residents of Ontario.

Nevertheless, the provincial government has many economic tools available to deal with Ontario's urban development and transportation problems. The use of these tools could lead to less pollution, reductions in costs to the taxpayer, a reduction in traffic congestion, an increase in the use of public transit, and more efficient land use.

One example of this kind of economic tool is full-cost pricing of car ownership, a fair way, according to economists, to reflect the costs incurred by public health and the environment. Following are some of the ways full-cost pricing could be achieved:

Increasing user charges

User charges are direct fees for a service provided. When levied by a government, there should be a reasonable connection between the cost of the service provided and the amount of fee charged. User fees shift some of the costs of a particular public service from the general taxpayer to those members of the public who choose to use the service or those who use the service more often. Thus, user fees are being explored by many Ontario municipalities for such services as garbage pickup and by the provincial government for highway use through toll roads.

Gasoline taxes

Fuel taxes are essentially a user cost for those who operate vehicles. The United Kingdom provides an example of a commitment to a gradual annual gasoline tax increase. In 1993, the U.K. government announced a policy of increasing gasoline prices by 5 per cent each year for the indefinite future. This has now been raised to 6 per cent per year. Currently, the Ontario government levies taxes on gasoline, but it appears there are no plans to increase these taxes (see page 81 for a description of current rates).

Many people respond to a fuel price increase by reduced vehicle use, especially where affordable public transportation is available as an alternative. In the longer term, fuel taxes affect consumer choices about where to live and work, as well as decisions by vehicle manufacturers on the fuel economy of their vehicles through choice of vehicle design, technology and marketing strategies.

Annual vehicle registration fees

Annual registration fees, tied directly or indirectly to fuel economy ratings or emissions, are used in Quebec. They are also widely used in Europe, where they vary by country and are based on vehicle weight, engine power and fuel type. Combined with higher fuel prices, these road taxes can reasonably be credited with contributing to smaller than average vehicle size and a more fuel-efficient car fleet than in North America.

Since January 1992, the Quebec government has required that all people who live in urban areas and own cars, sport utility vehicles, minivans and small trucks of less than 3,000 kg must pay a public transit support fee, to be included in their total annual registration cost. The current public transit support fee of $30 represents 12 per cent of the total annual registration cost of $255. The support fee is collected by the "Société de l'assurance automobile du Québec" (SAAQ) — the agency responsible for the registration system. The SAAQ remits the monies to the provincial transportation ministry, which in turn returns all monies to public transit operators in the form of operating grants.

The current Ontario vehicle registration fee does not accommodate any benefits for fuel efficiency, nor does it reward users of vehicles that pollute less. It also does not include a public transit support fee. In 1997 the Ministry of Transportation revised the annual vehicle registration fee system to allow one fee for each passenger vehicle in southern Ontario and a lower fee in northern Ontario. The fee for most cars in Ontario is $74 a year, much lower than in Quebec.

Road pricing

Road pricing is used in many countries as a means of paying for the capital, operations and maintenance costs of road infrastructure, including bridges, tunnels and restricted access highways. The revenue from the road charges can also be used to pay the full costs of road use (e.g., emissions, accidents, congestion). The Ontario government adopted road pricing practices when it introduced the 407 electronic toll road in the GTA.

There are two primary categories of road pricing programs:

- Pricing with kilometre-based fees that depend on the size of the vehicle and its use of the road at particular times of day. Technological methods now make it possible to use automated means for determining toll charges and revenue collection. Highway 407 is an example of this type of scheme.
- Area-wide pricing with fees charged for entering a congested area such as a downtown business district during peak hours. This option, not currently used in Ontario, could be used to promote a shift away from automobiles to public transit in the designated area.

The city of Bergen, Norway, with about 310,000 inhabitants, was the first European city to introduce area-wide pricing as a solution to serious traffic problems. Since the 1970s, the city had been faced with congestion, accidents and noise from local cars, but also from regional traffic, which was forced to cross through the city to reach other destinations. The Bergen toll ring was opened in 1986, with toll gates for all the main

access roads to the city. This pricing scheme has reduced the traffic entering Bergen, reduced serious accidents and the number of people killed in car accidents, and has stabilized the total number of accidents.

Reducing external costs

Vehicle inspection and maintenance programs

Ontario has announced that it will implement a vehicle inspection and maintenance program, Drive Clean, beginning in 1999, starting in the GTA and extending to other regions of the province by 2001. Emissions from cars and light trucks will be tested every two years against emission standards for the vehicle and its model year. If a vehicle fails the test, the owner will be required to make repairs, up to a set cost limit, in order to pass a retest. By requiring owners to ensure their vehicles meet emission standards, the province's proposed Drive Clean program will internalize the cost of excessive car emissions due to defective emissions control equipment or engines being out of tune. (For further discussion of the Drive Clean program, see page pp. 45-47)

Feebates

Governments can use feebates as an incentive to nudge new car buyers toward more fuel-efficient car models. (For further discussion of feebates, see p. 71)

ECO Commentary

Several tools, ranging from road pricing to gasoline taxes, can be used to recover some of the external costs of vehicle use not currently paid by drivers. These tools can be key elements in a strategy for managing travel by car and limiting the impact that the automobile has on urban areas and on the health of Ontario residents.

Finally, it is important to note that as vehicle use is reduced through these policies, more sustainable transportation alternatives, such as urban transit and the infrastructure for walking and cycling, would need to be enhanced at the same time.

Recommendation 18

All *EBR* ministries should make full use of economic tools to move the price of vehicle operation in Ontario closer to its true cost, which includes environmental and health costs.

Urban Sustainability: Development Charges

The *Development Charges Act*, administered by the Ministry of Municipal Affairs and Housing, governs the extent to which municipalities may recover from developers the capital costs incurred in providing new infrastructure — the roads, water, and sewerage necessary for the new development to exist. Development charges can shift the financial burden of providing new infrastructure away from existing taxpayers who already live in the municipality to developers, and to the new home buyers or commercial enterprises.

In Ontario, most of the older developments within a municipality have a compact form with higher population densities, while many newer developments have lower densities and sprawling development. Studies show that the lower the density of the development, the higher the cost, per unit, of providing infrastructure. Thus, if used effectively — incorporating the full cost of the infrastructure needed for low-density development — development charges can help to ensure that those who choose to locate in areas of urban sprawl pay its cost. For this to happen, development charges should be higher in new low-density developments that generally characterize urban sprawl. New homes and buildings that incorporate the full cost of low density development would be much more expensive than buildings in a higher density development — and this in turn could influence the choice of where people buy and choose to live and locate their businesses.

Problems with development charges

In practice, however, the system of development charges in Ontario does not operate to shift the cost of urban sprawl from the existing taxpayer to the new taxpayer who locates in low-density areas. In fact, the application of development charges often perpetuates the subsidization of low-density developments. For instance, some types of units in high-density areas bear a disproportionate percentage of the costs: it is estimated that development charges for apartment units in the GTA are on average $1,000/unit too high, based on their infrastructure costs.

Furthermore, there is no coordination among municipalities to ensure a consistent approach to development charges. Every municipality passes its own development charge by-law and calculates its own rate of development charges. The *Development Charges Act* imposes an upward limit on charges, but municipalities that wish to encourage development can impose lower development charges. Thus, there are discrepancies among municipalities, with no requirement that charges will be higher in low-density developments. For example, a developer would pay $5,198 in development charges to build a single-family dwelling in the city of Hamilton (high density), but only $4,528 in nearby Dundas, and $4,606 in other neighbouring low-density suburbs. As well, municipalities in Ontario have traditionally calculated their development charges on an average cost basis, applying the same fees across the entire municipality, regardless the density of the development. The mechanisms currently in place to pay for the new infrastructure generate a subsidy to buyers of low-density suburban areas by residents of higher density areas. These subsidies artificially lower the cost of low-density urban development, helping to perpetuate undesirable sprawl, with all of its attendant environmental impacts.

Possible solutions

One solution to this problem would be to adopt the principle of full-cost pricing for development charges, which would ensure that buyers of low density units would bear the proportionate cost of the infrastructure required by their choices. In fact, the GTA Task Force Report recommended that the *Development Charges Act* be amended to require municipalities to incorporate full-cost pricing methods into the calculation of development charges.

Another solution is for municipalities to waive development charges in high-density areas in need of revitalization. In 1996, Hamilton city council approved a three-year waiver of development charges in a defined area of the city core to encourage redevelopment.

One innovative example can be found in Lancaster, California, where the "anti-sprawl" policy calls for higher development charges and user fees outside the core service areas. The tariff schedule reflects the fact that such development costs the public more to build and service due to the additional distance from the city core.

ECO Commentary

MMAH does not currently have policies in place to ensure that municipalities follow a system of development charges that reflect the true cost of installing the infrastructure for low-density developments. It would be desirable to expand the categories of services to which development charges may be applied in the *Development Charges Act*, to permit municipalities to capture the full cost of new development.

Recommendation 19

MMAH should work with municipalities to ensure a consistent, province-wide system of development charges that reflects the true cost of installing new infrastructure.

Urban Sustainability: Brownfield Redevelopment

Brownfield sites are areas, usually within urban boundaries, which are abandoned or under-used because of industrial contamination. Developers and financial lenders have shied away from redeveloping brownfield sites in favour of greenfield development — paving over farmland or empty spaces on the urban fringe. But brownfields constitute prime targets for redevelopment because they offer opportunities for urban intensification, for revitalization of older areas of the city, and for increased tax revenues. They also can take advantage of existing municipal services. Thus, in some urban settings, brownfield redevelopment can form a part of the solution to urban sprawl.

Overcoming barriers to brownfield redevelopment

Several economic barriers have detracted from the feasibility of brownfield redevelopment. Under the *Environmental Protection Act,* administered by the Ministry of the Environment, every person who owns or who owned a property has been liable for cleaning up a contaminated site. Potential liability for the developers and purchasers thus lowered the value of property and damaged its economic viability. Lenders, too, could be reluctant to finance projects because of the potential liability and also because of potential transaction costs — for example, the cost of carrying out environmental risk assessments, higher interest rates, and protracted negotiations. In addition, the public may not have had confidence in the safety of the redeveloped site.

However, in 1996, the Ministry of the Environment revised its Guideline for Use at Contaminated Sites. Lenders facing potential liability can now investigate a contaminated site and take steps to preserve the value of the property without becoming fully liable for cleaning up the property. As well, to encourage lenders not to abandon contaminated properties, a recent decision of the Ontario Environmental Appeal Board has placed limits on the open-ended liability of lenders so that liability never exceeds the profitability of the property.

Brownfield redevelopment in Hamilton-Wentworth

The Region of Hamilton-Wentworth has a computerized database inventory of brownfield sites in the Region, and is developing a redevelopment strategy and action plan to facilitate brownfield redevelopment through public-private partnerships.

The Region is looking at using an innovative tax incentive scheme, called "tax incremental financing," which has been used extensively in the United States. Under the scheme, the developer is allowed to defer paying the higher, post-development tax rate on the developed land and instead continues to pay the lower, pre-development tax rate for a number of years. The developer then pays the difference in the two tax rates to the financial institution that financed the development while repaying the debt. Thus, the scheme benefits the developer, the lender, and the municipality that has converted an unused brownfield site into developed land. The scheme needs approval from the province before it can proceed.

In the United States, the federal *Taxpayer Relief Act* has established a tax incentive scheme to spur the cleanup and redevelopment of brownfields. The U.S. Environmental Protection Agency has a Brownfields Economic Redevelopment Initiative that provides communities with funding of up to $200,000 to initiate development of brownfield sites, as well as providing other types of financial and technical assistance. The USEPA has also introduced regulatory reforms to exempt municipalities and other government entities from liability when they become owners of real property through bankruptcy, abandonment, etc. There are also numerous state programs that provide assistance, tax relief, or exemption from liability to encourage the redevelopment of brownfield sites.

Potential solutions for Ontario

The provincial government has several ways it can remove some of the barriers to brownfield redevelopment:

- **Further limits on lender liability** — The Canadian Council of Ministers of the Environment has developed principles on contaminated site liability, with "conditional exemptions" for lenders, receivers and trustees who have not contributed to the contamination or have not had actual involvement in the control or management of the borrower's business. The thrust of the principles is that polluters and beneficiaries should pay, but that non-polluting participants should not be penalized.
- **Strategic planning** — Strategic planning involves investigation of the extent of contamination and review of cleanup options, with an approval plan agreed upon by all parties, including public authorities at the municipal and provincial level as well as the proponents and lenders.
- **Public funding** — Seed financing, loans, and tax incentives, for example, can be provided for redeveloping a brownfield site.
- **Information sharing** — The provincial and/or municipal governments can gather and distribute information about the condition and historic uses of brownfield sites to assist prospective purchasers and developers in their decision-making, For instance, an electronic "site registry" can be created, where developers can easily access information. British Columbia has established a contaminated site registry which is administered by the Ministry of Environment, Lands and Parks, and several states in the United States also have similar registry systems.

ECO Commentary

In addition to intervening at a regulatory level, the provincial government has an opportunity to become involved in brownfield redevelopment by assisting the private sector, by providing tax incentives, or by entering into partnerships to accomplish environmental goals.

Recommendation 20

MMAH and MOE should:

- **seek innovative methods to facilitate site remediation and brownfield redevelopment, without compromising standards for site restoration;**
- **extend incentives for brownfield redevelopment, and make it possible for municipalities to offer incentives;**
- **develop public/private partnerships for large-scale brownfield redevelopment;**
- **work with municipalities to create useful contaminated site registries.**

Further Readings on Urban Sustainability

A Strategy for Sustainable Transportation in Ontario: Report of the Transportation and Climate Change Collaborative, Ontario Round Table on Environment and Economy and National Round Table on Environment and Economy (1995)

Backgrounder: Greenhouse Gas Emissions from Urban Transportation, National Round Table on Environment and Economy (1998)

Clearing the Air: Transportation, Air Quality and Human Health Conference Proceedings, Pollution Probe and the York Centre for Applied Sustainability (April 1996)

Delegation/Exemption under the Planning Act: Implementation Strategy, Ministry of Municipal Affairs and Housing (December 1997)

Driving out Subsidies, Todd Litman, in Alternatives Journal 24:1 (Winter 1998)

Guideline for Use at Contaminated Sites in Ontario, Ministry of Environment and Energy (1996)

Ontario Land Development, Legislation and Practice, Robert Macaulay and Robert Doumani (1995)

Ontario's Smog Plan: Steering Committee Report, Ministry of Environment (January 1998)

Ontario's Smog Plan: (Draft) Work Group Reports - 1997 Compendium Document, Ministry of Environment (September 1998)

Provincial Policy Statement, Ministry of Municipal Affairs and Housing (revised February 1997)

State of the Debate: Greening Canada's Brownfield Sites, National Round Table on the Environment and the Economy (1998)

State of the Debate: The Road to Sustainable Transportation in Canada, National Round Table on Environment and Economy (1997)

The Economics of Urban Form, Pamela Blais, prepared for the GTA Task Force (September 1995)

The Financial Services Sector and Brownfield Redevelopment, National Round Table on the Environment and the Economy (1997)

The Land Use Planning System in Ontario: Achieving the Vision, Ministry of Municipal Affairs and Housing (August 1998)

The Planning Act in Transition, John G. Chipman (1996)

Trans-Action 98, Pollution Probe, Canadian Urban Transit Association, Toronto Transit Commission (May 1998)

Urban Canada, Nigel Richardson, in The State of Canada's Environment 1996, Environment Canada (1996)

Waste Reduction and Product Stewardship

Product stewardship is a way of ensuring that the producers and consumers of products assume responsibility for the wastes generated when products have reached the end of their useful life. In contrast, Ontario's approach allows consumers to rely on their municipal governments, supported through taxes, to dispose of and recycle most of these wastes.

The ECO looked at what other jurisdictions are doing to promote product stewardship. The research shows that in many cases, most notably in the comparison of provincial beverage container stewardship programs, Ontario fares worse than almost every other province in Canada. The Blue Box system, which was innovative when first introduced, is now facing serious problems. It costs municipalities $46 million more per year than it generates in revenue.

Ontario needs to end the stalemate on these issues and begin to shift the responsibility and cost of collecting and disposing of packaging waste and other used products from residents and municipal taxpayers to the producers and consumers of packaged goods.

Waste and waste reduction remain important issues in Ontario. A number of applications for review under the *EBR* have questioned whether Ontario's current laws and policies on waste reduction, reuse and recycling (3Rs) are effective and whether they are financially viable. They have also asked that Ontario adopt a product stewardship approach to waste reduction.

The issue of waste disposal also continues to generate conflict. Two contentious environmental assessment hearings were held in Ontario in 1998 to determine the environmental suitability of new landfill sites. Numerous applications for investigation under the *EBR* have been submitted to me by people who live near landfills and are concerned about the adverse environmental impacts they may have on their communities. Strong efforts to reduce waste and begin product stewardship programs can do much to minimize the need for new landfills and reduce their disruptive impacts.

All three of my previous annual reports have addressed these issues. I have recommended in the past that the Ministry of the Environment begin to enforce Ontario's refillable soft drink regulations or announce the changes it intends to make to them. In my 1996 annual report, I recommended that MOE and the Ministry of Consumer and Commercial Relations consider the benefits and costs of adopting new refillable container technologies in Ontario and implementing a deposit-refund system for liquor containers. Although MOE announced a new initiative in 1998 — the Ontario Waste Diversion Board — to generate financing for the Blue Box system (see discussion, p. 114) and other waste diversion programs, provincial ministries have never adequately responded to the recommendations in my reports.

I have reviewed MOE's decisions on waste reduction in response to the applications for review noted above, and have compared those decisions with measures other governments in North America and Europe are developing to reduce waste and promote product stewardship.

Wetlands

Eastern Ontario
Memorandum of Understanding
Registry # PB8E3007

description Lafleche Environment Inc., a waste disposal company operating in Eastern Ontario, had removed 145 hectares (ha) of wetlands through peat extraction from Moose Creek Bog, a wetlands partly on its property. The company planned to remove 30 ha more in order to operate a land-fill. The Ministry of Natural Resources couldn't do anything about the loss of the wetlands — as they are not protected under the municipal official plan. But to operate the landfill, the company had to carry out an environmental assessment (EA) and obtain approval under the *Environmental Assessment Act* from the Minister of the Environment. MNR proposed to include as a condition of EA Act approval that a Memorandum of Understanding (MOU) be established between the proponent and the Ministry of Natural Resources.

Under the MOU, Lafleche will provide up to $1.5 million to a trust fund over a 20-year period. The trust will acquire 400 hectares in Alfred Bog, another threatened but much superior wetlands in the same watershed as Moose Creek Bog. The rest of the trust funds will then be used to create and enhance another 400 hectares of wetlands elsewhere in Eastern Ontario. In total, the 175 ha of wetlands lost on Lafleche's property will be offset by gains of 800 ha elsewhere, a net gain of 625 hectares of wetlands.

public comments One of the people commenting on the proposed MOU thought it was unrealistic for MNR to expect to buy 800 ha of wetlands with only $1.5 million — land in Ontario can seldom be purchased at $2,000 /ha, said the commenter, who was also concerned about setting a precedent in which companies can pay off the government if they want to eliminate wetlands. Other commenters thought the MOU proposal should identify exactly where the extra 400 ha of wetlands would be located. The local municipality and an environmental group requested membership on the trust's board of directors, and the local Conservation Authority said the trust funds should be spent to buy wetlands within the South Nation River ecosystem, where wetlands loss was taking place.

decision The ministry made minor changes to the MOU, more precisely defining where in Eastern Ontario the wetlands would be secured, enhanced or created. Ministry staff have also pointed out that land in Eastern Ontario, especially in the Alfred Bog, can be purchased for about $1,000 to $2,000 per hectare, and that all of the remaining funds will not necessarily be used to purchase wetlands. Instead, other tools, such as conservation easements and agreements with private landowners, would also be used to protect wetlands — which is much less expensive than actually buying wetlands. Finally, the ministry and the company have invited the local municipality to sit on the board of directors and are considering who else might have membership.

The waste management problem posed by packaging and disposables

Only 40 years ago, milk and soft drinks were sold almost exclusively in deposit-bearing returnable bottles. Hardware, such as nails and screws, was sold in bulk. It was commonplace to repair consumer goods, significantly extending their life.

Since that time, the number and variety of consumer goods has exploded. Disposable products such as pens, lighters, razors, beverage containers, and cameras have become commonplace. Packaging is undoubtedly the most prevalent disposable good, including paper, bottles, cans, plastic wraps, sheeting, and pallets. The National Task Force on Packaging estimated that more than 20 per cent of the solid waste disposed of in Ontario in 1990 was packaging.

Packaging provides important benefits to consumers. It protects products, extends their shelf life, and at times carries important information. At the same time, partly because of waste packaging, governments have had to initiate anti-litter campaigns, plan for new landfill sites, close down and remediate out-of-date landfills and incinerators, and introduce and enforce controls for landfills and incinerators. The environmental impact of disposal of packaging includes litter, leachate from landfills, incinerator emissions, and pollution of air, water, and soils. Disposable packaging also consumes renewable and non-renewable resources, including energy supplies, forests and minerals.

The public expenditures on waste disposal and waste diversion are, in effect, a subsidy for the disposable goods and packaging that benefits the producers and consumers who generate and use them — all at the expense of the taxpayer. Dealing with the root problem — reducing the waste — would have two significant benefits: it would minimize the adverse environmental impacts, and it would bring significant financial savings to government and taxpayers. Product stewardship can achieve those benefits.

Product stewardship

Ontario's current approach to waste management is that products are the consumer's responsibility once they have been purchased. In turn, consumers rely on their municipal governments, supported through taxes, to deal with the disposal of waste. Product stewardship, in contrast, would ensure that producers assume responsibility for wastes generated in the manufacture and distribution of their products, and responsibility as well for their products when they have reached the end of their useful life.

Product stewardship is attractive to governments under pressure from tax weary voters, budget deficits, and competing demands for program funds, because it shifts some of the direct costs for waste reduction from municipal governments onto producers and consumers. Along with increased responsibilities for producers and distributors, consumers may have to pay higher prices for products and participate in new collection procedures. Thus, product stewardship reflects the "polluter pays principle," whereby those who create pollution bear the costs of complying with environmental standards. In this case, it includes responsibility for the cost

of collecting, recycling, re-using, and disposing of waste materials — costs which are not imposed on the general taxpayer, but on producers, distributors and consumers.

The concept of product stewardship takes into account that producers have the option to design products and packages to reduce the recycling and disposal costs. Similarly, consumers can choose which products they wish to purchase. Taxpayers, by contrast, have to pay for municipal recycling programs without any say over the volumes and types of material allowed in the programs. In the past four years many European nations have begun to extend the concept of product stewardship and have adopted policies and laws based on the new concept of Extended Product Responsibility (EPR). EPR involves a shift in focus from the producer to a product's entire life cycle. Change will not occur overnight but as part of an evolution. A first step is to move from viewing waste management as a process of waste disposal to one of waste minimization.

What are other jurisdictions doing to promote product stewardship?

British Columbia

British Columbia has introduced three product stewardship regulations to address a range of products, including beverage containers, post-consumer paint, and hazardous materials such as solvents, pesticides, gasoline, and pharmaceutical products. These regulations require that brand owners provide for the collection and return of packages and containers according to conditions that vary with the product. The regulations allow for the addition of other products in the future.

Quebec

Quebec's Waste Management Action Plan, 1998-2008, has a goal of recovering at least 65 per cent of all waste materials currently disposed of in Quebec, and reusing or reprocessing them as valuable resources by the year 2008. The plan, supported by legislated mandatory participation, outlines 29 specific actions and sets out specific targets to be reached. The provincial government will allocate $16 million annually to the program to support public information and awareness campaigns, research and development, coordination and follow-up, pilot projects, and the development of markets for recycled materials.

Federal initiatives in Canada

The Environmental Choice Program is the federal government's primary product stewardship initiative. Under the program, companies that meet specific guidelines can place an EcoLogo label on certain products or packages, identifying the products as environmentally preferable and thus allowing consumers to make environmental choices in the marketplace. Several hundred large, medium-sized, and small Canadian companies have been licensed to use the EcoLogo.

In another federal program, the National Packaging Protocol (NAPP), initiated by the Canadian Council of

Ministers of the Environment, 180 companies (members of the Food and Consumer Product Manufacturers of Canada) are making design changes to consumer products to reduce primary and secondary packaging. NAPP's goal of a 50 per cent reduction by the year 2000 in packaging waste sent for disposal was surpassed in 1996, four years ahead of schedule.

United States

The United States does not have a national comprehensive product stewardship program. However, the Environmental Protection Agency is trying to foster product stewardship by initiating partnering agreements to reduce waste and introducing mandatory and voluntary disclosure and labelling requirements, as well as bans on certain materials. Numerous states have begun economic and regulatory programs such as deposit-refund systems, taxes on waste products, waste disposal bans for certain products, and, in a few instances, mandatory take-back requirements.

Germany

Germany's ambitious waste reduction program requires that producers, distributors and retailers take back packaging waste and ensure that a certain percentage of these materials are either recycled or reused. In addition, at least 72 per cent of beverage containers must be refillable. The program includes the "Green Dot" initiative, in which participating companies paying a fee can place a Green Dot on their packaging, which is then collected separately from the regular garbage disposal system and reprocessed for a number of alternative uses. Between 1991 and 1997, packaging has declined by 13 per cent in Germany, after increasing steadily in the years preceding the program. Recycling rates now exceed 75 per cent for all but one of the seven types of packaging material. Furthermore, it is estimated that the 3Rs industry in Germany has created 17,000 jobs and stimulated a capital investment by industry of more than $7.85 billion Cdn since 1991.

United Kingdom

In 1997, the United Kingdom imposed producer responsibility obligations on all companies involved in the production and use of more than 50 tonnes of packaging material per year. The goal is to recover 52 per cent by weight of packaging waste and to recycle 26 per cent of packaging materials by 2001. Everyone in the "packaging chain" (producers of packaging, users of packaging, sellers of packaged products) is responsible for meeting a portion of the recycling/recovery obligation, although companies can devise their own individual compliance plan or join a "compliance scheme" registered with the Environment Agency.

The European Union Directive

In December 1994, the European Union passed the *Directive on Packaging and Packaging Waste*, which requires member states to recover 50 per cent of packaging waste by weight, either by recycling, composting, or incinerating with energy recovery. A minimum of 25 per cent of total packaging waste by weight must be recycled, and no material group may be recycled at a rate of less than 15 per cent of the total weight. Member states must meet these requirements by December 20, 1999, although the specific mechanism used to meet the requirements is left up to each state.

Summary of other jurisdictions

This brief review of waste reduction initiatives in other jurisdictions demonstrates that many governments are implementing solutions to waste management problems based upon the principles of product stewardship. This review also demonstrates that there is a broad range of policy options available to decision-makers. Jurisdictions that have achieved significant reductions in waste have generally implemented regulatory programs or threatened regulatory programs. Economic instruments, voluntary measures and education campaigns have supported the regulatory programs. A summary of the various initiatives is provided in the table below.

Summary of Product Stewardship Initiatives in Other Jurisdictions

Jurisdiction, Program & Date	Type of Program	Goals/Objectives
British Columbia - Product Stewardship Regulations (Various dates in 1990s)	Mandatory collection and take-back requirements for various products	e.g.: 85% recovery rate of beverage containers by 2000
Quebec - Waste Management Action Plan 1998-2008 (1998)	Mandatory participation, economic, voluntary and educational initiatives in support	65% recovery of all waste materials by 2008
Canadian Council of Ministers of the Environment — National Packaging Protocol (1990-96)	Participating companies implemented design changes to packaging	50% reduction in packaging by year 2000 (achieved: 1996)
United States - various voluntary initiatives (Ongoing)	Partnering agreements, information programs, disclosure and labeling requirements	Various waste products; no stated objectives or results
Germany-Green Dot Program (Implemented 1991, came into effect 1993)	Industry given option as to how to achieve mandatory packaging recycling objectives	Over 75% recycling rate for 6 of 7 material types, 69% for the 7th.
United Kingdom - Producer Responsibility Obligations (1997)	Industry given option as to how to achieve mandatory collection and recycling rates	52% recovery of packaging waste with 26% recycled by the year 2001
European Union - Directive on Packaging and Packaging Waste (1994)	Member states given option as to how to achieve mandatory collection and recycling rates	50% recovery of packaging waste with 25% recycled by the year 2000

What is Ontario doing?

In 1989, MOE estimated that Ontario produced 10 million tonnes per year of waste for disposal and said it wanted to reduce this amount by 50 per cent by the year 2000. The ministry expects to report in March 1999 that an interim target of 35 per cent was achieved at the end of 1997. MOE recognizes that product stewardship programs need to be part of reaching its 50 per cent diversion goal but has not begun to introduce these programs. The goal of 50 per cent is unlikely to be reached soon.

However, MOE does have powers to implement product stewardship measures. Provisions under the *EPA* enable MOE to pass regulations that:

- require municipalities to establish waste management and diversion systems
- can implement a deposit-refund system for any material or beverage-packaging
- require placement of a notice, mark or label on products, containers, or packaging
- regulate or prohibit the sale and use of disposable products and products that pose waste management problems
- require persons who manufacture, package, or sell a packaged product to achieve certain goals in relation to their packaging or any waste generated by these activities.

To date, Ontario has taken limited action in exercising these powers.

Blue Box system

For almost 15 years, the signature initiative of the Ontario government on product stewardship has been the Blue Box system. The wide-scale application of the Blue Box system originated in 1985, when soft drink companies and their packaging suppliers set aside some money for municipal recycling programs in exchange for relaxing the percentage of soft drinks that had to be sold in refillable containers. Throughout the 1980s and the early 1990s, the Blue Box system continued as a collaborative initiative and was expanded to include many other materials beyond just beverage containers. Despite the initial funding by industry, the system has always relied more heavily on provincial and municipal spending to sustain it. Today, the Ontario government has withdrawn financial support for the programs, and municipalities, still mandated by the province to collect recyclable materials, can no longer cover the costs of the programs.

The Blue Box system has become extremely popular with Ontario residents. The high participation rate has resulted in over 600,000 tonnes of municipal solid waste being diverted from municipal landfills in 1997, conserving a significant quantity of waste that would otherwise be disposed of.

THE BLUE BOX: WHO PAYS?

The Blue Box has become a fixture in most Ontario households, and most Ontarians take their recycling out to the curb without a second thought. But the management and funding of the Blue Box recycling system remains a controversial topic for municipalities, for the Ministry of the Environment, and for the producers of the materials that end up in the Blue Box.

Since 1995, the ECO has received three separate applications relating to Blue Box issues. The first two applications focused on the regulation of soft drink containers, while the third application, submitted in December 1997, requested that MOE establish a regulation allowing municipalities to recoup the costs of running Blue Box programs. Every ECO annual report has included some discussion of these issues.

Municipalities pay

More than 90 per cent of Ontario's population has access to the Blue Box system. All but the smallest municipalities are required by regulation to provide Blue Box programs, and to collect at least seven materials, including glass. To help fund their curbside recycling programs, municipalities received capital and operating subsidies from the provincial government. They also received some start-up funds from a private industry group called Ontario Multi-Material Recycling, Inc. (OMMRI), made up of producers of materials recycled by the Blue Box. Over the last decade, these organizations have contributed funds to Ontario's recycling programs approximately as follows:

Municipalities:	$375 million (capital and operating costs)
Provincial government:	$208 million (capital and operating costs)
Industry (OMMRI):	$ 41 million (capital costs)

But in 1996, the provincial government announced that it would not be extending its funding support for curbside recycling programs, and private industry also ended its funding of capital costs. At this point, municipalities, which sell their collected aluminum, paper, glass and other materials, have to fund the full cost of their recycling programs, although a portion of these expenditures is recovered through the sale of recycled materials. Moreover, according to the Provincial Auditor, in 1994 — even before funding support ended — less than 3 per cent of municipal recycling programs were able to break even financially. Today, the province-wide funding shortfall for the Blue Box system has been estimated at $46 million annually. Nevertheless, some experts suggest that the cost of the Blue Box system is still less overall than the cost of new landfills.

Debate stalemate

Provincial regulations that require municipalities to provide Blue Box programs are part of provincial government's plans to divert 50 per cent of waste from disposal by the year 2000. In 1996, Ontario's diversion rate was 32 per cent; observers doubt that the 50 per cent goal can be reached without renewed efforts. But there is no agreement on exactly who should be responsible for which part of the effort. Municipalities have no control over the design of products and packages or over the types or volumes of materials that flow into their

Blue Box programs. They argue that, rather than municipal taxpayers paying the full cost of the Blue Box system, industries should demonstrate better "product stewardship," either moving to deposit-return programs for beverage packaging or paying a tax on recyclables, with the revenue dedicated to funding 3Rs programs. Industries disagree, saying that deposit-return systems are not practical nor convenient for consumers. They also argue they should not be responsible for funding 3Rs programs that may be inefficiently run by municipalities.

In December 1997, the ECO received an application for review from a large municipality in southern Ontario, requesting that MOE establish a regulation that would enable municipalities to recoup the costs of providing Blue Box programs to residents. The application also requested that the new regulation provide an incentive to producers and retailers for taking full responsibility for reducing the environmental effects of packaging waste.

MOE decided not to conduct a review because the issue was already being reviewed by the Recycling Council of Ontario (RCO). The RCO released its report in the spring of 1998 after conducting extensive consultation and developing a range of options for Blue Box funding. The report, however, did not recommend a preferred approach to funding.

Minister announces voluntary funding

In a speech to the Recycling Council of Ontario (RCO) in October 1998, the Minister announced a plan to expand and improve the Blue Box system in order to achieve Ontario's waste diversion target. He announced that he would create a waste diversion board made up representatives of industry, municipalities and non-government organizations. The minister also said that he was beginning negotiations immediately with a number of groups, including food and consumer product and newspaper industries, and that the ministry would be asking them to contribute voluntarily to the cost of operating and promoting a more efficient Blue Box system. It was widely reported in the provincial media that the minister was calling upon industry to contribute $20 million annually to the cost of running the Blue Box system. However, MOE informed the ECO in March 1999 that no specific target has been set for industry financial support.

The minister also announced a $4 million contribution by the LCBO, reflecting the cost of recycling its bottles through the Blue Box system for 1998. In his October 1998 speech to the RCO, the minister also announced that he would visit the need for a stronger mechanism should this become necessary. Industry response to the minister's plan was noncommittal or negative. For example, the Canadian Newspaper Association said it was not prepared to offer up a voluntary cash donation. Two months after the minister's announcement, no industry sectors except the LCBO had stepped forward to volunteer funding for the Blue Box.

Blue Box funding problems persist

Having announced the waste diversion board, the ministry will now need to establish it, and encourage buy-in from various industry sectors. However, no timelines have been published by the ministry for the collection of

the $20 million/year to fund municipal recycling programs. Nor have any details been released on the type of regulations that might be put in place if the voluntary funding plan does not work.

In the meantime, municipalities are trying to cope with shrinking budgets and increasing demands due to the downloading of responsibilities by the province. Some municipalities, such as the Region of Peel, are contemplating cutting back their Blue Box programs. The City of Toronto passed a by-law in July 1998 requiring LCBO outlets to implement a deposit-return system for alcoholic beverage containers as a condition for renewing their business licenses in 1999. On December 18, 1998, the Ontario government responded by passing a regulation under the *Municipal Act* that removes Toronto's power to pass such a by-law.

Beverage containers

Ontario is the only province in Canada that does not have a comprehensive product stewardship program for beverage containers that directly assigns the costs to producers and consumers. The following Table compares the various beverage container product stewardship programs in the different provinces.

Beverage container waste is a leading candidate for product stewardship programs: a high quantity of containers end up in the waste stream, and containers are readily identifiable and thus easier to manage. Ontario's main beverage container product stewardship program, the Blue Box system, does not qualify as a true product stewardship program, moreover, because taxpayers finance a significant portion of the operation, not the specific producers and consumers of beverages. Estimates indicate that the system recovers approximately 35 per cent of the recyclable soft drink containers sold in the province – the rest still goes to landfills. Meanwhile, refillable containers now constitute only 2 per cent of soft drink sales as opposed to 50 per cent when the Blue Box system began in 1985. At that time MOE passed a regulation under the *Environmental Protection Act* requiring a minimum of 40 per cent of soft drinks to be sold in refillable containers and then later reduced this to 30 per cent.

The issue of Ontario's refillable soft drink regulations has long been the subject of dispute. In January 1995, the Toronto Environmental Alliance filed for an application for investigation under the *EBR* alleging that two companies had contravened Ontario's refillable soft drink regulations. The Ministry of the Environment found that the two companies had contravened the regulations. However, the ministry did not lay charges on the basis that it would be inappropriate to prosecute while the ministry and industry were in the middle of negotiating a solution to the dispute. MOE did agree to include the soft drink regulations in its overall regulatory review, which is still ongoing.

Unsatisfied with this response, a member of the environmental group began proceedings to prosecute one of the soft drink companies privately. This prosecution was terminated when Crown counsel, on behalf of the Attorney General of Ontario, intervened in the proceedings and withdrew the charge. The Crown justified this action on the basis that MOE had not enforced the soft drink regulations since 1991, that the soft drink company had relied upon this position, and that prosecuting the company now would be an abuse of the process of the court. This decision was appealed unsuccessfully.

Comparison of Provincial Beverage Container Stewardship Programs in Canada

Province	Type of Beverage				Diversion Rates
	Beer	Wine & Spirits	Soft Drinks	Water & Juices	
British Columbia	Deposits, return-to-retail	Deposits, return-to-retail or depot	Deposits, return-to-retail or depot	Deposits, return-to-retail or depot	Beer: 93% Soft Drinks: 83%
Alberta	Deposits, return-to-retail	Deposits, return-to-depot	Deposits, return-to-depot	Deposits, return-to-depot	Overall: 80%
Saskatchewan	Deposits, return-to-retail or depot	Deposits, return-to-depot	Deposits, return-to-depot	Deposits, return-to-depot	Overall: 94.5%
Manitoba	Deposits, return-to-retail (selected)	Levy for curbside collection	Levy for curbside collection	Levy for curbside collection	Overall: 35%
Ontario	Deposits, return-to-retail	Publicly funded Blue Box system	Publicly funded Blue Box system	Publicly funded Blue Box system	Beer: 98% Soft Drinks: 35%
Quebec	Deposits, return-to-retail	Levy for curbside collection	Deposits, return-to-retail	Levy for curbside collection	Overall: 77%
New Brunswick	Deposits, return-to-depot	Deposits, return-to-depot	Deposits, return-to-depot	Deposits, return-to-depot	Overall: 75%
Nova Scotia	Deposits, return-to-depot	Deposits, return-to-depot	Deposits, return-to-depot	Deposits, return-to-depot	Overall: 75%
Prince Edward Island	Deposits, return-to-retail	Deposits, return-to-retail or depot	Deposits, return-to-retail or depot	No collection system	Overall: >90%
Newfoundland	Deposits, return-to-retail	Deposits, return-to-retail or depot	Deposits, return-to-depot	Deposits, return-to-depot	Currently: 50% Goal: 80%

Source: Container Recycling Institute, *Beverage Container Reuse and Recycling in Canada* (Virginia: The Institute, 1998)

Ontario Waste Diversion Board

In October 1998, the Minister of the Environment announced a new policy on waste diversion. (To date this policy has not been posted on the Environmental Registry.) The minister's plan is to establish a private and public sector funding program called the Ontario Waste Diversion Board (OWDB), which will include representation from affected industries, municipal and provincial governments, consumer groups, environmental groups and other organizations. MOE indicated that the OWDB is expected to help municipalities reduce the costs of the Blue Box and increase waste diversion. According to the ministry, the food, beverage, consumer product, and newspaper industries, along with the Liquor Control Board of Ontario (LCBO), will be asked to contribute to the cost of operating and promoting a more efficient Blue Box system. Reports indicate that the OWDB, relying on voluntary measures without regulatory or other support from government, will generate approximately $11 million per year. In the meantime, the Blue Box system costs municipalities $46 million more per year than it generates in revenue. By the end of 1998, few details of how the OWDB would accomplish its goals have been announced. However, reports indicate that MOE wants an organization called

Corporations Supporting Recycling, a lobby group for industries that generate packaging waste, to run the OWDB. Such a group would clearly be in a conflict of interest in deciding on measures that can shift responsibility and cost of collecting and disposing of packaging waste from residents and municipal taxpayers to the producers and consumers of packaged goods.

Manufacturer Controlled Networks

Another recent initiative of the Ontario government is "manufacturer-controlled networks" (MCN). An MCN is a system set up by a product manufacturer (or a group of manufacturers) to collect and recover spent products. For example, a voluntary MCN in the U.S. involving the take-back of recyclable batteries has resulted in a recovery rate of 25 per cent.

MCNs have the potential to be effective in implementing product stewardship, but MCNs are not mandatory. It will remain up to each manufacturer to decide whether to implement an MCN. As well, voluntary participation by consumers means that diversion and recycling rates for many materials will be low. Currently, setting up an MCN is an arduous process due to regulatory requirements. To solve this problem MOE has proposed that the ministry would no longer require waste sites and waste systems established as MCNs to obtain approvals under the *EPA*, provided that they conform to the regulation.

The Beer Store

One example of a popular and successful product stewardship program in Ontario is funded and operated by the Brewers of Ontario, an industry association made up of Ontario beer companies, which is also one of the largest self-managing, private sector, consumer-packaging management systems in Canada. More than 81 per cent of beer is sold in refillable glass bottles and nearly 11 per cent is sold to restaurants and bars in refillable kegs. One-way beer cans account for only 7.4 per cent of sales by volume and one-way glass bottles for less than 1 per cent of total sales. All of these containers are subject to deposits, and more than 98 per cent of the containers are returned for the deposit. In addition, all containers and secondary packaging (cartons, can rings, caps and bags) associated with beer sales are returnable to The Beer Store, and nearly 98 per cent of all beer packaging is recovered.

The Beer Store system operates an exemplary product stewardship system that approximates a closed loop. If the brewers did not maintain this comprehensive system and instead shifted to a one-way distribution system (similar to the system now in place for soft drink containers), approximately 2 billion additional beverage containers and associated packaging, weighing between 200,000 and 400,000 tonnes, would be added to municipal Blue Box programs and garbage collection. This would cost municipalities between $10 to $30 million a year.

Specific products of concern

At the end of their useful life, some products tend to have greater environmental impacts than others. Household products like paint solvents, oils, batteries, cleaning compounds, pesticides and pharmaceuticals pose the greatest risks. These products dissolve and degrade in the environment, releasing substances that may be even more toxic than the products from which they originated. There is a pressing need to ensure that these products are not disposed of but are collected to be reused, reprocessed, or recycled.

Used Tires

Current tire stewardship programs in Canada focus on charging the consumer for the cost of diverting tires from the solid waste stream and using the money to subsidise recycling or recapturing operations until they mature and become profitable on their own. For example, Alberta charges a levy on the sale of new tires that is then used to support the recycling industry. Ontario previously had a similar program, but it was cancelled when revenue from the tire charges were not spent exclusively on tire diversion efforts.

Waste Oil, Filters and Containers

Manitoba, Saskatchewan and Alberta collaborated with the Canadian Petroleum Products Institute to develop a take-back program administered and paid for by industry. The program is supported by a regulation in each province that requires any supplier of lubricating products to operate or subscribe to an approved stewardship program. The regulation also provides for a levy to be charged to finance the program. The Alberta government anticipates that 79 per cent of all used oil will be recovered under this program. By way of contrast, a voluntary program facilitated by a regulatory change in Ontario in 1992 has resulted in 70 per cent of used oil being recovered but only 35 per cent re-refined.

Pharmaceutical Waste

British Columbia requires sellers of pharmaceuticals to collect unused drugs and their containers. Since 1996, pharmacy and drug manufacturing associations have had a joint program whereby the brand owners pay for the cost of collection, transportation and disposal of used drugs while pharmacies accept the waste and provide information and promotional support. As of July 1998, over 11 tonnes of pharmaceutical residuals had been collected. Ontario does not have a coordinated program to recover unused pharmaceuticals. Pharmacist associations annually conduct a voluntary program whereby consumers are encouraged to return unused/expired medication during the program, usually during a one-month period.

Batteries

"Charge Up to Recycle!" is a voluntary national return-to-retail collection program of rechargeable nickel-cadmium (Ni-Cd) batteries, modeled after a similar program in the United States. While the program is still in the early stages in Canada, results from the U.S. have indicated a recovery rate of approximately 25 per cent,

which is consistent with other similar voluntary programs that recover between 10 and 30 per cent of rechargeable batteries. Deposit- refund systems, on the other hand, have the potential to achieve much higher rates. Research undertaken on deposit systems for the Organisation for Economic Co-operation and Development in 1996 shows that deposits on lead-acid batteries recover between 90 and 98 per cent of sales in various Canadian provinces. Other than its participation in "Charge Up to Recycle!", Ontario leaves it up to municipalities to decide whether to recover household batteries as part of hazardous household waste collection programs.

ECO Commentary

Since the early 1990s, the Ontario government has not furthered product stewardship in the province. MOE made the Blue Box system a mandatory requirement for municipalities in 1995, and later that year it withdrew its funding for municipal Blue Box programs. Since then, laws administered by the Ministry of Municipal Affairs and Housing and by MOE have been amended to prevent municipalities such as the City of Toronto from instituting their own programs requiring product stewardship. Ontario stands in stark contrast to other jurisdictions that have vigorously pursued product stewardship initiatives over the course of the past decade.

The few initiatives that Ontario has introduced in recent years rely entirely on voluntary action from the private sector. Experience from other jurisdictions shows that reliance on purely voluntary measures, unsupported by mandatory goals or objectives, is ineffective, limited, and unlikely to achieve high rates of waste diversion. Voluntary and educational measures do have an important role, however, and should be used to promote the achievement of mandatory objectives.

Ontario's Blue Box system has made a significant contribution to waste diversion in the past decade in Ontario. But the evidence reviewed here suggests that in the years since the introduction of the Blue Box, Ontario has fallen behind in its waste reduction efforts. Other jurisdictions, notably Quebec, British Columbia and Germany, have taken effective steps toward implementing product stewardship programs. It is time for Ontario to rethink its waste diversion initiatives and to design and implement effective product stewardship programs to bring Ontario in line with new programs that are already working in other jurisdictions. In this way, Ontario would reduce the costs to taxpayers and promote better environmental outcomes.

Recommendation 21

To promote product stewardship in Ontario, MOE should:

- **introduce effective measures to require brand owners, distributors, packaging producers and other manufacturers to take increased responsibility for the management of the wastes associated with the manufacture, use, treatment and/or disposal of their products, and to require these companies to reduce the production and use of disposable, non-recyclable products.**

- **develop a range of regulatory, voluntary, economic and educational initiatives to promote flexibility and efficiency in achieving its 3Rs targets.**
- **identify opportunities to implement specific measures to collect and divert hazardous used products and materials, such as tires, oil, paints, solvents, pharmaceutical products, batteries, pesticides, and cleaning products, from the waste disposal stream.**

Recommendation 22

MOE should, in association with other *EBR* ministries such as MCCR, introduce mandatory waste reduction, reuse and recycling targets for certain types of products and packages and ensure adequate monitoring, enforcement and reporting.

Further Readings on Product Stewardship

Publications:

Recycling Roles and Responsibilities, Final Report, by the Recycling Council of Ontario (April 1998).

A Strategy to Promote Refillable & ReUse in Ontario, by the Citizens' Network on Waste Management (1997)

Washington Waste Minimization Workshop: Volume I — Five Waste Streams to Reduce, and Volume II — Which Policies, Which Tools?, proceedings of a workshop organized by the Organisation for Economic Co-operation and Development in Washington D.C. on March 29-31, 1995.

Extended Product Responsibility: A New Principle for Product Oriented Pollution Prevention, by Gary A. Davis, Catherine A. Wilt and Patricia S. Dillon (Prepared in cooperation with the U.S. EPA - June 1997)

Web sites:

Note: Information on Web sites is regularly modified and updated. This information was current as of February 10, 1999.

Recycling Council of Ontario: <www.rco.on.ca>

-information on recycling and product stewardship initiatives in Ontario

Alberta Tire Recycling Management Association: <http://www.trma.com/>

-information about Alberta's tire stewardship program.

B.C. Ministry of Environment, Lands and Parks: <www.env.gov.bc.ca/epd/epdpa/mwr/lar.html>

-information on B.C.'s waste management and waste reduction programs

Quebec's Ministry of Enviroment and Wildlife: <www.mef.gouv.qc.ca/fr/environn/mat_res/index.htm>

-information on Quebec's Waste Management Plan (in French)

Jim Motavalli, E/The Environmental Magazine: <www.emagazine.com/may-june_1997/0597feat2.html>

-article entitled **The Producer Pays**, May-June 1997

United States Enviromental Protection Agency WasteWise: <www.epa.gov/wastewise>

-information on the U.S. EPA **Wastewise Update** program

Duales System Deutschland AG: <www.gruener-punkt.de/e/index.htm>

-information on Germany's Green Dot programs

Lands for Life

Lands for Life was the Ministry of Natural Resources' strategy for involving residents in planning for the protection and use of publicly owned land and resources — including forests, wildlife and minerals — in a 46-million-hectare area of central and northern Ontario. This attempt to involve the public ultimately proved to be unsatisfactory because of shifting and unclear processes, goals, timelines and expectations. While the ECO's review highlights problems with the public participation process, by the end of 1998, no final outcome for Lands for Life had been announced by the minister. The ECO will continue to monitor Lands for Life closely.

LFL: An Outline

The Ministry of Natural Resources launched its "Lands for Life" (LFL) planning exercise in February 1997, to develop new land use plans for publicly owned Crown lands controlled by the ministry. The first phase of Lands for Life, still under way, is to develop Regional Land Use Strategies (RLUS) for 46 million hectares of land in northern and central Ontario. Most of this area is Crown land, and with the exception of existing provincial parks and conservation reserves, is licensed to the forest industry.

MNR divided the area into three regional planning areas: Boreal West (BW), Boreal East (BE) and Great Lakes-St. Lawrence (GLSL). The minister appointed a Round Table (RT) of local citizens representing industry, environment, tourism, fishing and hunting and other interests for each planning area. Each RT was to carry out public consultation and to develop a draft Regional Land Use Strategy, designating lands for forestry, tourism and parks and protected areas, to resolve longstanding conflicts between these three land uses.

The planning process was more controversial and time-consuming than the government anticipated when it set a timetable to complete the first phase of planning — and to have approved Regional Land Use Strategies in place — within 15 months. Instead, more than two years later, the process is still under way. The minister extended the Round Tables' final deadlines by four months, but they were still unable to complete their analyses and one important round of public consultation before being required to submit their draft recommendations at the end of July 1998. The minister released the Round Tables' recommendations for public comment at the end of October 1998. As of December 1998, the minister was still considering these recommendations, as well as an enormous number of public submissions on the recommendations, and was negotiating privately with the forest industry and some environmental groups.

The Lands for Life initiative was an extremely ambitious and innovative attempt to consult with the public in preparing land use plans. MNR staff and the Round Tables made substantial efforts to involve the public in resolving complex issues. The ECO found, however, some significant problems with the public consultation process, and inadequacy of time, background information and scientific analysis.

I made a number of recommendations to MNR on Lands for Life in my 1997 annual report. In 1998 I monitored MNR's actions on my recommendations regarding public consultation, and whether sufficient background information was provided to the Round Tables and the public. I also reviewed whether planning and public consultation were carried out according to MNR's Guidelines for the process.

The Minister of Natural Resources has said that the Round Tables' recommendations are based on comprehensive public consultation and consideration of the best scientific and ecological information. But critics of the Lands for Life process say that there was insufficient public consultation, and that the Round Tables had neither the time nor the environmental information needed to make good decisions. I have found substantial evidence to support these concerns, and my findings are set out in some detail below. To remedy these shortcomings in the process to date, I recommend that MNR provide the public with additional information and analysis of the environmental effects of the recommendations and provide as well another opportunity for public comment before the Regional Land Use Strategies are approved.

In the second phase of Lands for Life, the entire province will be divided into about 15 sub-regions, and more detailed land use plans will be prepared. To avoid some of the problems experienced in the first phase of Lands for Life, I recommend that the MNR design the second phase to be fair and transparent, and that the ministry ensure that enough time is allowed for good information gathering and analysis. Comprehensive guidelines for the second process should be developed, with broad public consultation, and they should be in place before the development of sub-regional land use plans begins.

LFL: The Details

MNR's Guidelines

Early in the Lands for Life process, MNR said it would be preparing guidelines to provide direction to the Round Tables and to ministry staff on how to carry out planning, public consultation, and preparation of the Regional Land Use Strategies. MNR hoped to have the planning guidelines finalized before the startup of the three regional Round Tables.

The Guidelines for the Preparation of Regional Land Use Strategies (the Guidelines) were finally released in draft form to the public in late September 1997, and posted on the Environmental Registry for comment. The 50-page document includes directions on the responsibilities of Round Table members and MNR staff; the required content and format of the Regional Land Use Strategies; and the public consultation requirements.

The ECO received an application for review of the LFL process just before MNR released the Guidelines, expressing concern about the "lack of clear procedures and guidelines for the decision-making process." MNR responded that no review of the LFL process was required, in part because the ministry had produced the Guidelines. "These Guidelines are currently being finalized," the ministry said, "but in the interim they are being used as a working draft. These Guidelines address many of the topics that are suggested in the Application for Review as being necessary, in particular with respect to public consultation."

The ECO has continued to receive letters from the applicants and other members of the public who are concerned about the fact that the public consultation and other matters prescribed in the Guidelines do not appear to have occurred as promised. For this reason, the ECO has carefully examined the Guidelines and other materials, and attempted to assess whether the proposed directions have been followed.

The Guidelines, and any future amendments to them, were supposed to be approved by the Minister of Natural Resources. Instead, the Guidelines were never finalized, MNR staff say, because the process was dynamic, and kept changing and evolving. The Round Tables, appointed in June 1997, were already meeting and developing their own procedures before the draft Guidelines were provided to them. Thus, they used parts of the Guidelines, and in other cases "did their own thing." The Round Tables apparently believed they had the power to decide whether or not to use the Guidelines, and MNR staff and the minister allowed them that freedom.

Some of the key commitments and instructions in the Guidelines and other MNR and Round Table materials, such as the Round Tables' terms of reference, are described below, with ECO analysis of how the LFL process actually unfolded.

Was the public given adequate opportunities for comment?

The Guidelines set out detailed public consultation requirements for each stage, including the methods of notice to be used, a minimum contact list, the types of information to be made available to the public, and the length of each comment period.

According to the Guidelines (and other documents such as the Round Tables' terms of reference), the public was to be given the opportunity to submit comments at four important stages of development of each Regional Land Use Strategy:

1. Invitation to participate (30 days, including Environmental Registry notice)
2. Review of background information and planning options (30 days, including Environmental Registry notice).
3. Review of preferred planning option (45 days, including Environmental Registry notice, plus public meetings or open houses).
4. Inspection of Draft Regional Land Use Strategy and Provincial Government Response (30-day inspection period, including Environmental Registry notice and "direct written notice, including copies of the draft Strategy and Response, to all parties identified in the contact list").

In my 1997 annual report, I recommended that during the LFL planning process, MNR consult with Ontarians from all parts of the province, provide the best available maps and data to the public, and provide adequate comment periods on the Environmental Registry for each of the remaining three stages. I recommended that the public be given more than 30 days to comment on the Regional Land Use Strategies before they were implemented.

The first stage of public consultation was carried out in 1997 as planned. The second stage was difficult for the public because the Round Tables followed different schedules and procedures. And the third stage did not occur as planned because delays resulted in substantial changes to the planning process. As of

December 1998, it is unknown what further opportunities will be provided for public consultation.

To date, Registry notices have been posted for three stages of the LFL process. Each Round Table posted an "invitation to participate" in its planning process in August 1997, for a 30-day comment period. Following this invitation to participate, the Round Tables held open houses in cities and towns within their planning areas, as well as in four cities in southern Ontario (Toronto, Ottawa, London and Kingston). The public response to the invitation to participate was overwhelming, and it became clear that the Round Tables would need more time to consider the public submissions and the resource information being provided by ministry staff. The Round Tables were granted a three-month extension to the original timetable.

The second stage of public consultation — the review of background information and planning options — was carried out by the Round Tables, but with three very different types of documents to comment on, and three very different schedules. In the winter and spring of 1998, the Round Tables each posted their proposed land use options on the Registry for between 30 and 37 days (GLSL in February; BE in March and BW in June). Following the release of these options reports, the Round Tables again held public meetings in northern and southern Ontario. Again, the public response was greater than expected, with thousands of people attending the public meetings, and about 1,000 written submissions to the Round Tables. The Round Tables were granted another one-month extension by the minister.

According to MNR's original outline for the process, once the Round Tables were finished consulting on a set of land use options, they were to develop and consult on their preferred options before submitting their recommendations to the minister. The MNR Guidelines then required a 45-day review period with Registry postings and public meetings or open houses. The Round Tables requested a further extension of three months to allow each of them to carry out this third planned stage of public consultation. Instead, the minister decided that the Round Tables should submit their *draft* recommendations on July 31, 1998, without any further public consultation.

After receiving the draft recommendations, MNR asked the Round Table chairs to consolidate their recommendations into a single report. The resulting "Consolidated Recommendations" report was posted on the Environmental Registry on October 30, 1998, for a 31-day comment period. Given the high level of public interest in the report, and the fact that members of the public had to review 242 recommendations, and perhaps the three Round Tables' reports to the minister, I had concerns about the adequacy of this comment period. I urged the Minister of Natural Resources to extend the comment period to 90 days and to provide additional public consultation opportunities. The minister did not act on my recommendation.

Approximately 14,000 comments on the Consolidated Recommendations document were received by the minister. The latest posting on the ministry's Lands for Life Internet site says that "after considering the public comments and carrying out a review of the recommendations, the Ontario Government will determine what the next steps in the process will be."

MNR and the Round Tables have made efforts to consult with Ontarians from all parts of the province. In response to concerns that Ontarians living outside the planning area did not have adequate access to the process, MNR did ensure that the Round Tables held some public meetings in southern Ontario, provided information available to all Ontarians on its LFL Internet site and on the Environmental Registry, and set up LFL reading rooms in several cities and towns in southern Ontario. The Round Tables also invited provincial interest groups and southern Ontario-based organizations to participate in workshops to discuss specific issues such as tourism and parks.

However, the role of the Provincial Forum, a group that MNR established to permit the participation of provincial-level interests in LFL, was minimal, especially later in the process. The group met five times, but has not met since March 1998. Some of these interest groups were invited by MNR in early 1999 to continue to meet with MNR and forest industry representatives to try to resolve their concerns about the amount of land to be protected. But the invitation was not extended to all members of the Provincial Forum.

In summary, given the enormous public response to the Consolidated Recommendations report and the fact that the government's response to it may produce proposals substantially different from the Round Table recommendations, the public deserves another comprehensive consultation opportunity. Some parties are concerned that the ministry has carried out private negotiations on the Round Tables' recommendations with the forest industry and with some environmental groups, and fear that the ministry may implement the results of those negotiations without allowing any further public consultation. For all of these reasons, the public should get another public consultation opportunity before the minister approves the Regional Land Use Strategies.

Did the public have good access to information?

The Guidelines stated that a wide range of background information and RT information would be available to the public. In general, although a great deal of information was made available to members of the public throughout the process, some important documents were difficult to obtain, and there were inconsistencies in the information provided by the different Round Tables.

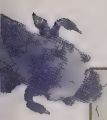
The three Round Tables produced varying amounts of background material and reports during the planning process. Some of the information prepared by MNR and the Round Tables was mailed out to people on the Round Tables' mailing lists, some was available at public meetings held by the Round Tables, and some of it was available only if one found out about it and specifically requested it. Some important information was not provided to members of the public even when requested. Of the three Round Tables, the GLSL Round Table provided by far the most information to the public.

The MNR reading rooms provided an excellent service to the public, acting as a central repository for large quantities of information, but my staff found that some of the information that was supposed to be available at reading rooms was not there.

The LFL Internet site was set up early in the process, and received up to 2,000 visits daily. The LFL process was more transparent than any previous planning exercises of this ministry, because of the attempt to provide ministry data and maps, and a fair amount of material from the Round Tables, on the Internet site. The sheer volume of some of the material could not have been provided to the public in any other way. Updates to the Internet site were easily flagged with a "what's new" feature, although the site didn't seem to be updated regularly. Unfortunately, the maps and data on the Internet site were very difficult to use, with a large proportion of the data unreadable, or still "under construction" even at the end of the LFL process.

While it was very helpful to have minutes of Round Table meetings posted to the Internet, the quality, completeness and timing of the publication of the minutes varied among the three Round Tables. The Boreal East minutes were extremely comprehensive, the others less so. It took several weeks or even months for minutes to be posted to the site, and the minutes of some particularly important meetings of the GLSL and BW Round Tables were never posted. For example, Boreal West never did post the minutes of three months' worth of the meetings in which planning options and draft recommendations to the minister were developed.

In order to explain and consult with the public on their proposed land use options, each Round Table developed a tabloid outlining their proposals, including maps and a workbook that members of the public could fill out to provide comments on the options. The tabloids and associated workbooks were sent to everyone on the Round Tables' mailing lists, and were made available at MNR offices, on the Internet and at public meetings. The Round Tables and MNR staff did a good job of providing the options documents to the public.



WERE PUBLIC COMMENTS ON LFL ALWAYS TAKEN INTO ACCOUNT?

The Round Table chairs stated that LFL is "the most extensive and comprehensive public dialogue about land use planning in Ontario's history." As an example, they pointed out that the public was given "workbooks" in which they could provide their comments on the Round Tables' proposed options and that about 7,000 workbooks were returned. It is unclear, however, how well those detailed public submissions were considered by the Round Tables. For example, Boreal West RT, which was several months further behind the other two Round Tables at the second stage in the process, received about 1,000 completed workbooks containing detailed comments on the planning options, but had only reviewed summary analyses of 350 of them by the time the Round Tables had to submit their draft recommendations to the Minister of Natural Resources. The Boreal East RT reviewed summary analyses, prepared by independent contractors and MNR staff, of the close to 4,000 workbooks they received. The Great Lakes-St. Lawrence Round Table received more than 1,800 workbooks, and carried out and published an analysis of all of the comments received.

Later in the process, however, it was difficult for people to obtain and review some important documents in time to make informed comments. MNR did not mail out copies of the Consolidated Recommendations Report, and did not follow through with plans to send letters to people on the LFL mailing lists to tell them that the report was available. People who noticed the ministry's news release or Environmental Registry posting had to request a copy from the ministry, or review it on the Internet or at one of the reading rooms. And members of the public who wanted to see the Round Tables' draft recommendations to the minister, which contained a lot more detail than the Consolidated Recommendations document, were asked to pay $35.95 for each of the three documents, or travel to one of the MNR reading rooms to review those reports. It is difficult to understand why, with the volume of material placed on the site, the draft recommendations of the three Round Tables were not also available electronically.

The ECO received many letters of concern from people who had signed up to the Round Tables' mailing lists and who were then shocked to find out through some other means that the Consolidated Recommendations had been released with a 30-day deadline for comments. MNR set up a reasonable expectation in the Guidelines that people would at the very least be notified of such an important stage in the public consultation process.

How well did the Round Tables achieve consensus?

The Guidelines and other material state that each draft Regional Land Use Strategy submitted to the minister was to represent a consensus position of the Round Table. If the Round Table did not arrive at a consensus position on all issues, the unresolved issues would be documented and submitted to the minister with the draft strategy.

The goal of having the Round Tables develop the Regional Land Use Strategies by consensus was integral to the design of the LFL process, because MNR was trying to resolve longstanding conflicts about how much land should be protected, and who should have access to the forest and its resources. Consensus was also important because all three Round Tables included more members representing resource industries than environmental, tourism or aboriginal interests. If the members could reach agreement about how to use the forests, the ministry's job would be much easier. It would also be more likely that the broader public would accept the resulting Regional Land Use Strategies.

The Consolidated Recommendations report claims that each Round Tables' draft recommendations "generally represented a consensus of its members" and further that this was "a remarkable accomplishment." The report states that the only "exceptions to consensus" were concerns expressed by four members of the Boreal West Round Table and one member of the Boreal East Round Table, but the report does not summarize those concerns. People who want to know what these concerns were would have to purchase the reports and appended letters, or view them at one of MNR's reading rooms. To assess the degree of consensus, the ECO carefully examined not only the dissenting reports, but also Round Table minutes and other statements made by Round Table members.

The Boreal East Round Table did reach consensus on all but three major issues, and included the dissenting member's report in the body of their recommendations to the minister, but the ECO has concluded that only the Great Lakes - St. Lawrence Round Table recommendations could be considered "consensus-based," for the following reasons:

- The three Round Tables used different definitions of consensus, and only GLSL said the objection of any member would negate a recommendation.
- Some members of the Boreal West Round Tables have said they did not even see their Round Tables' draft recommendations before they were submitted to the minister.
- Only six Round Table members and the chair of Boreal West, all representing the forest and mining industry, or municipal / economic development interests, actually agreed to the draft recommendations. All of the members representing environment, tourism, Aboriginal or hunting and fishing interests had either resigned from the Round Table, or wrote that they could not endorse the recommendations.
- The Round Tables ceased to exist on July 31, 1998, and did not have an opportunity as a team to complete their work. Instead, the three Round Table chairs were kept on the job, to "consolidate" the three draft recommendations reports. So any changes, omissions or additions to the RT draft recommendations are the product of the Round Table chairs, ministry staff and the government, and not a consensus of all the Round Table members.

Were natural resources objectives developed?

One of the major tasks of the Round Tables was to develop "broad objectives for natural resources within the planning area, based on application of provincial policies." The proposed regional objectives were to be presented for public review, and then used as the basis for evaluating RT options and recommendations.

MNR's main LFL document says "the key overriding principle is that of ecological sustainability," and set three main provincial objectives for the Regional Land Use Planning Process: to complete a system of representative parks and protected areas; to implement the government's policy on resource-based tourism; to provide certainty of a secure land base to the forest industry.

MNR staff laid out these objectives and other applicable provincial policies for the Round Tables. The Regional Land Use Strategies were to contain regional objectives that would implement the provincial policies and objectives.

As described in the Consolidated Recommendations report, "each RT took a different approach to setting goals and objectives." Boreal West did not publish its own goals and objectives at all. Boreal East published detailed and measurable draft objectives in their options stage tabloid, and posted them on the Internet site, but did not have time to refine them further. The list of BE draft objectives were included in the July 1998 draft recommendations to the minister, and are very specific, measurable, and consistent with broader provincial policy on ecological sustainability. The Great Lakes - St. Lawrence Round Table consulted on their draft goals and objectives in February 1998. GLSL refined their draft goals and objectives as a result of public

comments, and included them in their draft recommendations to the minister. Because of the inconsistency among the Round Tables, however, none of the objectives were included in the Consolidated Recommendations.

OLD GROWTH FORESTS

In last year's annual report, the ECO described the Ministry of Natural Resources' July 1997 proposal for a Conservation Strategy for Old Growth Forest Ecosystems (the draft Conservation Strategy), and said we would monitor whether public concerns about old growth were resolved through this strategy.

MNR already had a Conservation Strategy for Old Growth Red & White Pine, approved in 1994, and had done some work to implement it — for example, protecting some areas as conservation reserves, and recently incorporating new rules for red and white pine into forestry guidelines revised by the ministry in 1998. The new draft Conservation Strategy is much broader than the Red and White Pine Strategy, however, and applies to all types of old growth forests.

The draft Conservation Strategy still has not been approved by the minister. Last year the ECO reported that most of the work to implement the strategy, such as developing detailed definitions and inventories of old growth for species other than pine, still needs to be undertaken by MNR. It appears that work has not yet been carried out. The draft Conservation Strategy stated that it would be implemented through Lands for Life (LFL) planning.

The draft Conservation Strategy was provided to the LFL Round Tables, but did not have the status of an approved ministry policy to guide the Round Tables. MNR staff say the Round Tables were asked to take the draft Conservation Strategy and the 1994 Red and White Pine Strategy into account when developing regional objectives. The draft Conservation Strategy and various LFL documents stated that objectives and targets for conservation of old growth would be developed by the Round Tables and included in Regional Land Use Strategies. But in the end, only one Round Table, the Boreal East, recommended objectives or targets for old growth conservation.

The Round Tables were not provided with adequate data or maps to help them make decisions about old growth. MNR's park system targets do not include representation of old growth forests, and the gap analyses (see p. 135) carried out by the ministry did not address old growth forests because the baseline data does not contain the necessary detail about age and type of forest. Thus, MNR's candidate protected areas identified only a few well-known old growth red and white pine sites already inventoried in a special study a few years ago.

The Round Tables were told by MNR that they would be given mapped data identifying old growth forests, separate from the gap analyses and natural heritage assessments. It was not provided by MNR. At one point, MNR asked the forest industry to supply the Round Tables with maps, derived from industry inventories, that would identify old growth forests, but industry refused.

Two of the Round Tables recommended that MNR complete its work on developing conservation strategies for old growth species other than white and red pine, including completing the necessary inventories. At the time of this writing, the minister had not yet responded to these RT recommendations.

ECO Commentary

It appears that much of the policy, definition and inventory work on old growth species, other than red and white pine, still needs to be completed by MNR. I urge MNR to finalize its Conservation Strategy for Old Growth Forest Ecosystems before the next phase of land use planning under LFL begins. If the draft strategy is approved, and MNR confirms its proposed policy to protect representative old growth sites, then the necessary inventory and mapping work must be completed by MNR as soon as possible to ensure that old growth sites are considered before irreversible land use decisions are made.

Last year, the Ministry of Natural Resources assured the ECO that "if additional protected areas are required as a result of implementation of the 'Old Growth' strategy, this option will remain available even after phase 1 of LFL." The ECO will continue to monitor the ministry's actions on old growth conservation.

A review of the Round Tables' meeting minutes and other materials shows great disparity in how the goals and objectives were actually applied during the process. Boreal East RT members were asked by MNR staff to prioritize the draft goals and objectives to be used as indicators for the evaluation process. Their top priorities were: 1. employment; 2. maintain area for mineral exploration and mining; and 3. wood supply for mills. Natural heritage representation and conservation of diversity and ecosystems were ranked 15 and 16.

Those members of the Boreal East and Boreal West Round Tables who objected to their Round Table recommendations said that they failed to meet the environmental objectives of Lands for Life and that the majority of the Round Table members put economic and social objectives, such as the goal of maintaining wood supply to mills, ahead of any environmental objectives.

The Consolidated Recommendations do not include any of the Round Tables' regional goals, objectives or targets. At this stage in the process, it appears that the first phase of LFL has failed to set regional objectives and targets for the desired future forest to guide subsequent sub-regional and operation planning, such as the preparation of forest management plans.

Did the Round Tables or the MNR evaluate the environmental effects of the proposals?

According to the Guidelines and other MNR planning directions, the Round Tables were expected to evaluate the environmental effects of the various land use planning options they were choosing among. "Options must be evaluated . . . This evaluation will include an examination of a full range of environmental, social and economic factors. All proposed outcomes must ensure the ecological sustainability of Ontario's natural resources. The principal criteria used to evaluate sustainability are: biological diversity; forest ecosystem condition and productivity; conservation of soil and water; and multiple benefits to society. MNR's Statement of Environmental Values must also be considered in the evaluation."

Each RT's final preferred planning option report was supposed to contain an assessment of their preferred option, including a summary of the anticipated social, environmental and economic effects if it were implemented.

MNR staff prepared several technical guidance papers setting out an evaluation procedure. MNR relied, in part, on the existence of these technical papers to reject the *EBR* application for review of the Lands for Life process.

It appears that only the Great Lakes-St. Lawrence Round Table undertook the required evaluation. The Great Lakes-St. Lawrence RT requested a technical evaluation of their four land use scenarios by staff of MNR and Ministry of Northern Development and Mines. From the summary of the technical evaluation contained in the RT's July 31, 1998, report to the minister, it appears that the RT and ministry staff undertook a detailed evaluation as suggested by the Guidelines and technical papers.

In their July 31, 1998, preliminary recommendations to the minister, the Boreal West RT said that "due to time constraints" they were not able to evaluate their recommendations for their impact on biodiversity, core protected areas, old growth or wetlands, but that a supplementary report would be sent to the minister as soon as the evaluation was complete. The evaluation remained unfinished, as the Round Tables were disbanded when the draft recommendations were given to the minister on July 31, 1998.

The Boreal East RT intended to carry out a detailed technical evaluation, including an assessment of sustainability, a social and economic analysis, and a site-specific analysis, and planned to include it with the RT's draft recommendations to the minister. But this technical evaluation was not completed in time.

The Consolidated Recommendations document acknowledges that the report "does not evaluate the full range of environmental, economic, and social effects and impacts of the recommendations." Instead, because the Round Tables didn't have time to complete their evaluation, MNR evaluated the Round Tables' recommendations against some common indicators, to give the public a preliminary assessment. This assessment by MNR appeared in the Consolidated Recommendations report.

But this "preliminary" MNR staff assessment is missing important evaluations of several indicators — for example, how the recommendations would affect wood supply or the fulfilment of MNR's targets for natural heritage protection. The Consolidated Recommendations report says that MNR's evaluation would be made available for public review as soon as it was completed. As of December 1998, however, this MNR evaluation of the potential effects of the recommendations on sustainability had not yet become available to the public.

To date, neither the Round Tables nor the Ministry of Natural Resources has carried out an evaluation of the full range of environmental, economic, and social effects and impacts of the recommendations. MNR has also failed to consider its Statement of Environmental Values in the systematic, scientific process promised in the Guidelines, technical guidance papers and the RLUS terms of reference. MNR staff should still carry out this systematic evaluation of the potential environmental effects of the recommendations, and provide this information to the public, before finalizing the RLUS.

Were the Round Table recommendations consistent with provincial policy?

The Guidelines state that all Round Table objectives, targets, options and recommendations must be consistent with the MNR's mandate and existing provincial policy and legislation. All applicable existing provincial legislation, policy, plans and guidelines were provided to the Round Tables. The Round Tables' terms of reference, in particular, are emphatic on this point: "In all cases, recommendations must be consistent with existing legislation and provincial policies."

But from the beginning of the process, Round Table meeting minutes show that certain members of Round Tables intended to challenge existing MNR policies, particularly parks policies and MNR's mandate to complete the parks system. Despite clear statements in MNR documents, ambiguous statements were later made both by MNR staff and the minister. In fact, a letter from the Minister of Natural Resources to the Round Tables appeared to grant their requests to make recommendations that varied from existing provincial policy, on a case-by-case basis.

The recommendations of the Round Tables thus recommended substantial changes to existing provincial policies on parks, forestry, mining, hunting and aboriginal peoples. The fact that unexpected and unsolicited major policy changes were recommended has concerned many parties. Many of the proposed policy changes are extremely controversial. For example, the Round Tables implicitly recommended that MNR abandon its policy direction to complete a system of representative parks and protected areas. They have also explicitly recommended changes to permitted uses in parks and conservation reserves, to allow for more commercial uses. Many of these proposed changes would require regulatory change or revision to approved MNR policies, and should not be implemented without providing the public an opportunity to comment on them as ministry proposals.

Were the Round Tables given adequate time and information?

In last year's annual report, the ECO recommended that "MNR should ensure that the Round Tables have the time and the background information on forestry resources, natural heritage features and tourism issues to allow them to make informed recommendations." (Rec. #10, 1997 ECO annual report.)

Round Table members expressed substantial concern with the adequacy of MNR's background information and provision of the data and analysis to the Round Tables, especially given the tight timelines for the Lands for Life process. (These problems were less pronounced in the Great Lakes - St. Lawrence region.)

For example, the Boreal East RT stated in their July 31, 1998, recommendations to the minister that:

> *"The RT decisions were made in consideration of serious flaws and gaps in both the natural science and socio-economic data. In many cases, assumptions were made based on incomplete and apparently inaccurate data. With only limited time available, confirmation and clarification of information has been impossible."*

The ECO has found that the Round Tables' concerns about the quality of the data appeared in their reports to the Minister of Natural Resources, but were not included in the Consolidated Recommendations document released by the minister in October 1998. Thus, it is unlikely that many members of the public are aware of these concerns.

All three Round Tables made many recommendations to improve data collection and sharing for resource sectors such as forestry and wildlife, confirming the ECO's 1997 findings of problems with the ministry's existing information bases and monitoring and reporting capabilities. For example, the GLSL Round Table recommended that ministries maintain or at least have access to more up-to-date and compatible resource inventories and state of the resource information, and advocated more sharing of information between ministries, the private sector and the public.

The provision of background information to the Round Tables was plagued with problems stemming from inadequate databases; outdated resource inventories; difficulty in comparing or combining information from different sources; and technical difficulties with new computer

information systems. The ECO followed two kinds of information through the LFL process, to assess whether the RTs were given the time and background information needed. Those detailed assessments follow.

Natural heritage information

One of the three main goals of Lands for Life was to complete a system of parks and protected areas representing the province's natural features and ecosystems. MNR staff were to analyse how well Ontario's existing parks and other protected areas represent the province's natural diversity. They could then see which natural landscapes were not protected, and identify new candidate areas to be protected as parks or conservation reserves. These studies are called gap analyses. Once completed, these gap analyses were to be forwarded to the Round Tables.

MNR staff had to prepare a gap analysis for each of the 39 ecological "site-districts" within the LFL planning area. Almost all of these had to be completed from scratch, as few of these studies had previously been undertaken in the northern part of the province before Lands for Life was announced. MNR's original target to complete the site district studies was October 31, 1997. Technical problems with new computer systems, and the sheer volume of analysis required, meant that the natural heritage information was provided to the Round Tables later than originally planned. The studies began to trickle in to the Round Tables in November, but it was late January 1998 before all the gap analyses were completed and provided to the Round Tables.

Because of the tight timeframe, the gap analyses were done from existing information, with little time to update the base information or carry out the field studies that MNR would normally do to complete gap analyses. Partly because of concerns about the quality and currency of the information MNR used to prepare the analyses, as well as concerns about the scientific basis and criteria used to identify candidate sites, both Boreal East and Boreal West rejected MNR's gap analyses.

Boreal East criticized MNR's gap analysis methodology. MNR recommended protection of areas that were important to the forest or mining industry, but the BE Round Table asked MNR staff to re-do the analysis, changing the selection criteria, in order to identify fewer and smaller candidate protected areas. One Round Table member, who disagreed with the industry members of his Round Table, felt that MNR's gap analysis was misused by the Round Table. That member said that the Round Table "severely reduced" the size of all areas identified in MNR's gap analysis before taking options to the public for comment, then dropped most of the sites when recommending candidate protected areas to the minister.

To illustrate what was at stake in the debate about the gap analyses, here is what happened with the Boreal East planning area. Currently, only 1.5 per cent of the Boreal East planning area is protected in provincial parks or conservation reserves. Using the same database, but very different criteria and methods, MNR staff, a coalition of environmental groups, and the Boreal East Round Table members all came up with very different results. MNR's original gap analyses provided to the Boreal East Round Table identified about 3.7 per cent of the planning area to be protected as new provincial parks or conservation reserves, and the

Partnership for Public Lands recommended that 16 per cent of the planning area be protected in new parks or conservation reserves. But the Boreal East Round Table ended up recommending protection of only 0.3 per cent of its planning area as new provincial parks or conservation reserves.

The gap analysis was even more controversial in the Boreal West planning area. A dissenting report from two of the Boreal West Round Table members says that the RT "dismissed the MNR's gap analysis results," claiming that they would have too great an impact on the forest product and mining industries.

The GLSL was the only Round Table to put forward MNR's gap analysis as an option for public comment, even publishing a report of summaries describing all of the areas proposed as candidate sites by the MNR. This Round Table eventually recommended that less land be protected in parks or conservation reserves than originally identified in the MNR's gap analysis, but the public was allowed to see exactly what had been proposed, and see how the Round Table made its decision.

All three Round Tables made recommendations about changing the gap analysis methodology and reassessing the scientific basis of natural heritage representation and identification. All three RTs deferred decisions on several proposed protected areas because they did not have time to collect the appropriate information, there was not enough information available to make a firm recommendation, or there was not enough time to reach consensus. Despite the time extensions to the LFL process, it is apparent that the Round Tables did not have adequate time or information to make informed decisions on parks and protected areas, one of the main goals of the regional phase of LFL planning.

Forestry information

One of the primary objectives of the Regional Land Use Strategies was to identify sustainable levels of wood supply to industry. MNR was supposed to provide information and recent studies to the Round Tables to help them set targets and assess the sustainability of forestry activities.

The wood supply assessments were instead undertaken by a joint committee of industry and MNR representatives, and only the most general information was provided to the Round Tables. A promise by MNR to the industry to keep the wood supply agreements of individual mills confidential meant that the Round Tables did not have the detailed information they required for the task. Industry members from all three Round Tables took the position not to share information that could be used against their interests. What that meant was that the Round Tables didn't have access to some of the information that used to be collected by MNR, but is now collected by industry, such as current forest resource inventory information.

The Round Tables also did not have enough information to assess the sustainability of forestry, as described by the Boreal West Round Table in their reports to the minister:

"...the Round Table has heard many conflicting views concerning the sustainability of the forest. Are the harvesting and silviculture practices maintaining and enhancing the ecological integrity of the Boreal Forest or does an impending disaster loom? Are the present growth and yield curves hiding fibre surpluses or are they leading to over-cutting?...

We have struggled with these conflicting views and the lack of convincing information backed by credible research that would allow reconciling the differences. In addition, we feel that a series of cutbacks in MNR funding for research has seriously hampered the Ministry's ability to be stewards of the forest today and tomorrow. Existing databases from different sources are not easily integrated for purposes of interpretation and planning. Where comparative data does exist, its ownership is fragmented and not readily available to the public."

Individual members of the Round Tables repeatedly requested, but were denied, forestry information from MNR throughout the process. Sometimes MNR could not provide the information because they did not have it. In other cases they had it, but would not release it. In one case, the Boreal East Round Table asked MNR staff to provide them with a summary of all the audits of forestry operations in their planning area. MNR staff said that they could provide them only with reports which had already been approved for release by the minister, but they did not have the minister's permission to release 1996 or 1997 audits.

In the end, the Round Tables were not able to carry out the task of determining sustainable levels of wood supply. All three RTs determined that their highest priority was to keep the current allocations of wood supply to each mill, despite information from MNR staff and other experts that a wood shortage is looming. It appears that all three Round Tables were hampered by the fact that MNR does not have adequate information on forestry, and that the forest industry was not willing to share its information with the Round Tables or the public. MNR has informed me that it could not provide the Round Tables with information on wood supply to mills because of restrictions under the *Freedom of Information and Protection of Privacy Act.* MNR also suggests that Round Table members exceeded their mandate in trying to examine forestry and other matters at a local scale instead of a regional scale.

Who had responsibility for the Lands for Life process?

It is important to remember that although the Round Tables were given certain responsibilities for consulting with the public, and providing recommendations to the minister, the legislative, policy and financial responsibility for Lands for Life remains with the Minister of Natural Resources. The Director of MNR's Land Use Planning Branch was responsible for coordinating the program, with help from a Policy Coordination Group, made up of program branch managers and regional directors. The Regional Project Teams for each Round Table were responsible for gathering, assembling and analysing data; assisting with the development of objectives and planning options; the evaluation of the environmental, social and economic implications of the planning options; and assisting with the development of the draft RLUS. So senior MNR staff were, or should have been, in control of the process throughout. MNR staff did an enormous amount of good planning work, despite

the time constraints. It appears that much of the deviation by the Round Tables from the process designed by MNR staff occurred after the Round Tables sought and obtained consent from the minister.

There may have been very good reasons for encouraging RT participants to think "outside the box" and to come up with creative ways to resolve longstanding land use conflicts. But those changes to the essentials of the land use planning process should have been made with full public consultation and debate and according to some kind of formal process, such as a revision and approval of the Guidelines. Better yet, had the ministry consulted on the planning process and the proposed Guidelines well before the Round Tables were established, the process would have been more consistent and all parties would have known, and perhaps supported, the rules.

The *Public Lands Act* (*PLA*) was amended in 1998 to add a new legal framework for MNR's Crown land use planning. The amendments were first proposed in 1996, and were intended to be in place for the first phase of LFL, but were not passed by the Ontario Legislature in time. The *PLA* says that "a land use plan shall be prepared in accordance with the land use planning guidelines approved by the Minister." As for the content of the guidelines, they "shall contain provisions respecting,

(a) the contents and preparation of land use plans, including public involvement and decision-making processes; and
(b) the establishment of zones to define the purposes for which public land, water and natural resources within each zone may be managed."

Other references to the Guidelines imply that they must be in place before a minister approves or amends a land use plan. MNR staff have told ECO staff that the ministry is hoping to finalize guidelines before the sub-regional phase of LFL planning begins. This is encouraging. I believe that having planning guidelines in place before the next phase begins will help MNR avoid many of the problems found in this first phase of planning, especially if the Ministry of Natural Resources has clearly thought out the process and allowed the public and parties most affected by the process to provide comments on the Guidelines before they are approved.

Recommendation 23

MNR should not implement any of the Lands for Life Round Tables' recommendations for major revisions to existing provincial policies without further substantive public consultation by the ministry, including notice on the Environmental Registry.

Recommendation 24

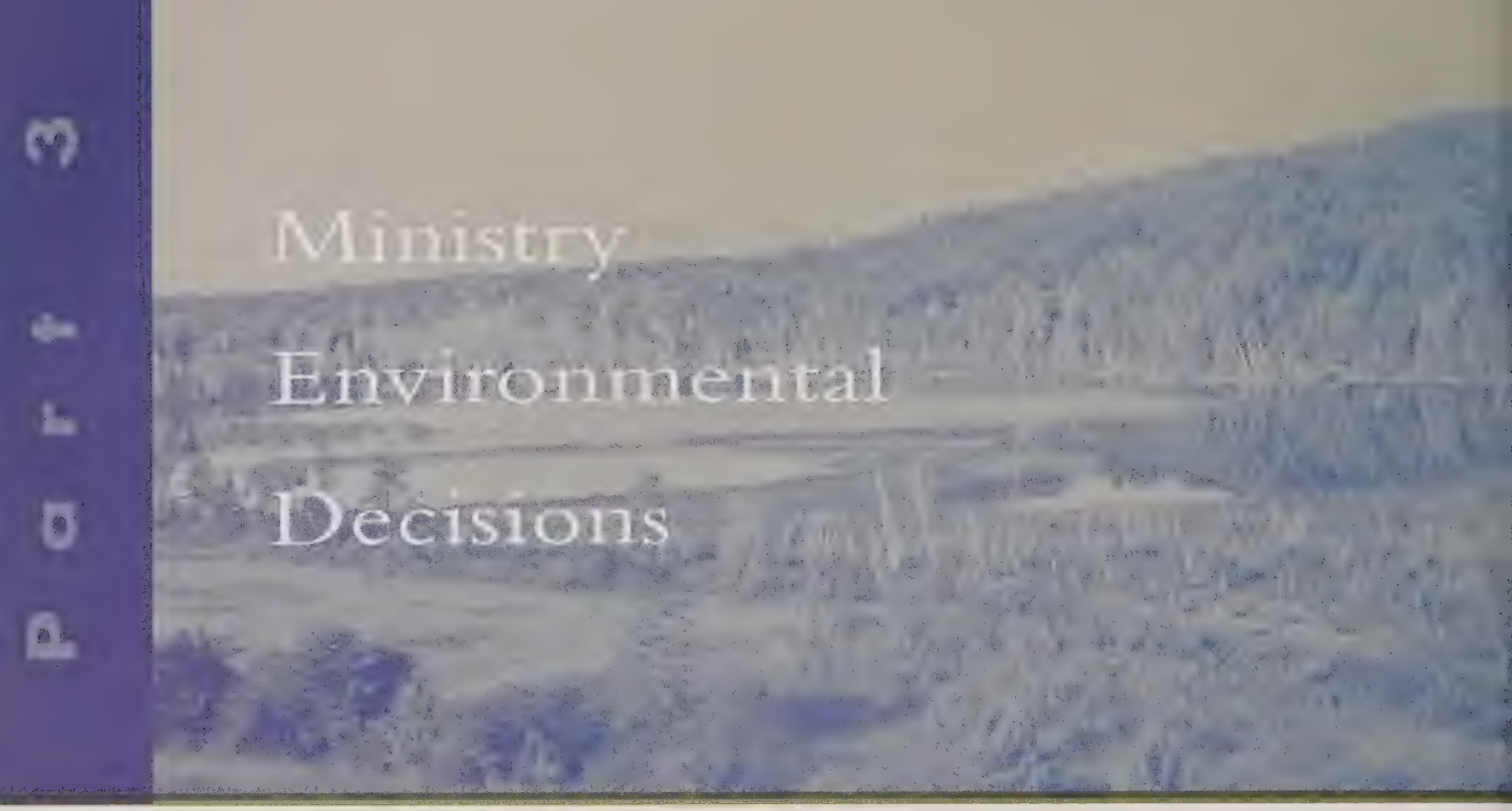
MNR should carry out and publish for consultation a thorough evaluation of the potential environmental effects of the proposed Regional Land Use Strategies (RLUS) before they are finalized.

Recommendation 25

MNR should provide for adequate public consultation on the proposed RLUS before they are finalized and implemented. As a minimum, this would include notice to everyone on the Lands for Life contact list, and a comment period on the Environmental Registry.

Recommendation 26

MNR should allow adequate time to prepare, consult on, and approve the planning guidelines required under s. 12 of the *PLA* before beginning the sub-regional phase of Lands for Life planning.



Ministry Environmental Decisions

Review of New Laws and Regulations

In 1998, the pace of change to environmental laws was slower than during the last three years. The most noteworthy legislation this year was the law creating a competitive market for the generation and sale of electricity in Ontario, ending the monopoly of Ontario Hydro. The ECO reviewed these and other legal reforms. In one case, Bill 82, MOE failed to comply with the *EBR* when it shortened the required 30-day comment period to a mere 10 days.

Each year the ECO reviews environmentally significant laws and regulations that are passed or proposed during the year by the ministries prescribed under the *EBR*. There are several essential questions we consider in determining how the ministries applied the purposes of the *EBR* in coming to their decisions: Has the ministry provided adequate opportunities for public input? Have the public's environmental concerns been accommodated? The ECO also follows up on how the new laws are working to determine whether they are benefiting the environment, and we undertake reviews whenever a matter concerning one of these laws is raised by residents of Ontario.

In my 1996 and 1997 annual reports, I indicated that several ministries were proceeding with an agenda of ambitious legislative reform. In those reports, I noted that amendments had been made to many of the environmental statutes and regulations prescribed under the *EBR*. In 1998, the pace of legislative reform slowed somewhat, but change was still extensive. Seven ministries covered by the *EBR* proposed or passed environmentally significant Acts or regulations. Some of the most noteworthy legislative changes made in 1998 are discussed in more detail on the following pages. They include the new *Energy Competition Act* (Ministry of Energy, Science and Technology) and new landfill standards (Ministry of the Environment). For an outline of most of the statutes and regulations reviewed in 1998, see Appendix C.

Ministry of Agriculture, Food and Rural Affairs (OMAFRA)

New Law: Bill 146, the *Farming and Food Production Protection Act, 1998* (FFPPA)

What the new law means

The *Farming and Food Production Protection Act, 1998,* provides broader protection to farmers against complaints from neighbours than the *Farm Practices Protection Act, 1988*, which it replaces. This Act expands the range of nuisances permitted to farmers as a result of normal farm practices. Nuisances permitted, such as noise, odour, and dust, now also include flies, smoke, vibration, and light. The new law also stipulates that no municipal by-law can restrict a normal farm practice, if the practice is determined to be "normal" by the Normal Farm Practices Protection Board. As well, people who object to a normal farm practice will for the most part be unable to bring a stop to the nuisance related to the practice through court orders.

At the legislative committee hearings, farmers supported the greater protection the Act provides them, pointing out that it does not allow increased pollution but protects them from nuisance lawsuits. Municipalities expressed concern that the restrictions on their power to make by-laws restricting normal farm practices is "undemocratic."

The ECO has received a number of complaints from members of the public about nuisances caused by farm practices, particularly from people who feel enjoyment of their property is diminished by the impact of neighbouring farming activity. The *Farming and Food Production Protection Act, 1998,* does favour farmers' ability to conduct their activities and downplays the rights and concerns of other property users. While the law does not override the authority of the Ministry of the Environment to enforce the *Environmental Protection Act* or other environmental legislation, in actuality farm nuisances are handled by OMAFRA staff, and not by MOE enforcement officers. Hence, farm discharges may not be dealt with as vigorously as industrial discharges and emissions. The ECO will continue to monitor and report on the impact of this new law.

Ministry of Consumer and Commercial Relations (MCCR) and the Technical Standards and Safety Authority (TSSA)

Last year's annual report indicated that the ECO continues to monitor the compliance of the Technical Safety and Standards Authority with the *EBR.* In 1997, MCCR formally delegated its fuel safety regulatory responsibilities under the *Gasoline Handling Act* (*GHA*) to the TSSA, a non-governmental organization. The ministry also delegated most of its responsibilities under the *EBR* to the TSSA. MCCR continues to be responsible for posting Acts, policies and regulations on the Registry, and has coordinated these responsibilities with the TSSA.

New Law Proposed: the *Technical Standards and Safety Act*

What the proposed new law means

The proposed Act would consolidate elements of seven existing technical safety statutes, including the *Gasoline Handling Act*, and repeal those statutes. The Act continues a legislative trend noted in my 1997

annual report, whereby technical details set out in legislation are moved to regulations. This provides more flexibility to ministry officials and TSSA staff to make further changes, since regulations do not have to be brought to the Legislative Assembly. (They are still posted on the Environmental Registry, however, if an amendment is proposed.)

Ministry of Energy, Science and Technology (MEST)

New Law: Bill 35, the *Energy Competition Act, 1998*

What the law means

The *Energy Competition Act (ECA)* will implement a competitive market for the generation and sale of electricity in Ontario.

According to "Directions for Change," a plan on restructuring the electricity market released by MEST in November 1997, a competitive market will be established in Ontario by the year 2000. MEST said that the changes "must be flexible enough to ... spur more efficient and environmentally benign technologies" and that "the government will be considering market-based mechanisms that would favour more environmentally preferred forms of generation."

The principal goal of the *Electricity Act* part of the *ECA* is to promote competition in the electricity sector. The new *Electricity Act* also creates several new corporations, including the Ontario Power Generation Incorporated (OPGI) and the Ontario Hydro Services Company (OHSC). OPGI will own and operate Ontario Hydro's electricity generation facilities while OHSC will own and operate transmission and distribution systems. Neither OHSC nor OPGI will be Crown Corporations. When fully implemented, the *Electricity Act* also repeals the *Power Corporation Act*, the statute which created Ontario Hydro.

In early 1998, MEST appointed a Market Design Committee (MDC), made up of industry and customer representatives, to assist with the development of new energy policies and to develop recommendations for the design and operation of Ontario's electricity market. To help achieve the purposes of the new legislation, the Ontario Energy Board (OEB) was given extensive new powers to regulate the electricity sector, including power to "facilitate energy efficiency and the use of cleaner, more environmentally benign energy sources in a manner consistent with the policies of the Government of Ontario."

In addition, the Ontario Cabinet is provided with new powers to make regulations under the *Ontario Energy Board Act* and the *Environmental Protection Act* in the following areas:

a) Requiring retailers to residential or small business consumers to obtain electricity retailing licences from the OEB.
b) Requiring retailers to make timely disclosure to MOE of contaminants emitted by electricity generation facilities, the nature of the fuels burned, and the process of generation used at the facilities.

c) Authorizing MOE to determine whether claims made about contaminant emissions, generation processes and fuels burned are accurate and in accordance with the regulations.
d) Requiring retailers to file reports and evidence on contaminant emissions, generation processes and fuels burned with the Ontario Energy Board.
e) Establishing the rules for emissions trading and the manner in which reductions, credits or allowances acquired by a generator under the *Environmental Protection Act* may be used in determining whether there has been compliance with the standards established in the regulations.
(f) Requiring retailers to inform consumers about the nature and quantity of the contaminants emitted by generation facilities, the nature of the fuel, and the process of generation used at the facilities.

In addition, MEST claims that the *ECA* gives Cabinet the power to ensure that coal-burning plants in the United States producing cheap, dirty electricity cannot compete unfairly with Ontario companies such as OPGI. Ontario companies which buy electricity produced in the U.S. will be required to disclose to consumers and regulators how much pollution is caused by the electricity they generate and sell. The minister stated in the legislative hearings on the *ECA* that these types of generators won't be able to get a licence to sell electricity in the province if they don't meet Ontario's environmental standards. Since then, MOE officials have expressed serious doubts as to whether they will be able to control the licences in this way.

Amendments to the *Environmental Protection Act* contained in the *ECA* will also allow Cabinet to establish programs and other measures for the use of economic and financial instruments and market-based approaches, including emissions trading, for the purposes of maintaining or improving existing environmental standards, protecting the environment and achieving environmental quality goals in a cost-effective manner. MEST claims this initiative also presents an opportunity for reducing air pollution.

Provided adequate information is available, these changes will empower many Ontario consumers to buy cleaner electricity, and encourage producers to respond by shifting production to cleaner sources of electricity. However, the proposed regulations, which will contain the important details on how the Ontario government intends to implement this new system for regulating electricity markets, were not released before the end of 1998. The ECO will continue to monitor this.

ECO findings on the *Energy Competition Act*

Staff at MEST and MOE have made a strong effort to consult with a wide range of stakeholders on options for restructuring of the electricity industry. Both ministries voluntarily posted Registry notices of consultations and provided adequate time as well as multiple opportunities to comment on the options. However, there are a number of important concerns about environmental matters that have yet to be resolved.

Concerns about planning

MOE is reviewing options for applying the *Environmental Assessment Act (EAA)* to energy projects in Ontario's restructured electricity sector. Before restructuring, Ontario Hydro was subject to the environmental planning requirements of the *EAA* if it undertook major projects. No explicit provision has been made to ensure that basic environmental planning processes will be followed by the companies that will now operate in Ontario when large new projects such as fossil-fuel burning plants and transmission facilities are initiated and developed.

While MOE can require individual projects to undergo an environmental assessment (EA) under the *EAA*, past experience indicates that decision-making on which projects are required to undergo an EA has been inconsistent. Thus, many important projects could escape an EA review if such requirements remain the primary vehicle for environmental planning. Only municipal planning laws would apply to projects that were not designated under the *EAA*.

In this case, significant gaps in the environmental decision-making process would exist, and it is unclear how the provincial government would coordinate approval to ensure that provincial interests would be adequately taken into account. MOE officials have indicated that they intend to concentrate on those energy projects with significant environmental effects. As well, the Market Design Committee has recommended that OEB, MOE and MMAH create a level playing field for all companies seeking environmental approvals. "Examine the current procedures for environmental, planning and other approvals," MDC said, "and amend those procedures so that the approval depends on the size and type of project and its potential environmental impacts rather than on its corporate form or ownership . . . . Environmental approvals may create unnecessary barriers to new entry in the competitive market," MDC added, especially where responsibility for the approvals "straddles more than one government agency."

Conservation programs

In the past 20 years, Ontario Hydro developed programs to promote energy conservation by consumers, often working in cooperation with other energy companies and stakeholders. For example, Hydro supported Green Communities Initiatives (GCI) in several Ontario municipalities, a program to promote energy and water conservation and waste reduction by homes and businesses across Ontario. Restructuring the electricity market will bring an end to these programs unless specific efforts are made to reintroduce them, since every electricity generator in Ontario will try to maximize their electricity sales, instead of discouraging electricity use. MEST has told the ECO that in the summer of 1999 the OEB will be undertaking consultations on bench-marking for industry performance, and it expects that recovery of costs for voluntary initiatives on energy conservation will be reviewed as part of this consultation process.

Cumulative environmental effects

Ontario Hydro is subject to an emission cap for sulphur dioxide and nitrogen oxides and has a voluntary limit on annual carbon dioxide emissions. These limits would not apply to private generators. In my first annual

report, I pointed out that cumulative environmental impacts can contribute to the slow deterioration of natural resources and environmental quality.

MOE does not have an emissions inventory for all electricity generators operating in the province. The regulatory requirement promised under the *ECA* that retailers file reports and evidence with the Ontario Energy Board on contaminant emissions, fuels burned, and generation processes provides an excellent opportunity to monitor cumulative environmental effects.

Public participation

At present, neither the *OEB Act* nor the *Electricity Act* are prescribed under the *EBR*, and thus proposals for regulations and amendments to regulations made under these laws will not have to be posted on the Registry, and Ontario residents will not have an opportunity to comment on them. Unless these Acts are prescribed, their regulations will also not be subject to other public participation requirements of the *EBR*, such as applications for review and applications for investigation. MEST officials have indicated that they are reviewing whether these new laws should be prescribed. As an interim step, they have agreed to post information notices on the Registry of the new *OEB* regulations on pollution disclosure requirements. (For further discussion of this issue, see pp. 54-65 "Opening the Electricity Grid..."). The ECO will continue to monitor this legislation.

Recommendation 27

- **MEST should prescribe relevant portions of the *Ontario Energy Board Act* and the *Electricity Act* under the *EBR* for the posting of proposed regulations to ensure that the notice and comment provisions of the *EBR* apply to environmentally significant regulations developed by MEST under these two laws.**
- **MOE, MMAH and MEST should clarify their policies on the types of energy projects that would be subject to provincial approvals and place these policies on the Environmental Registry for public comment.**
- **MOE and MEST should create an emissions inventory for all electricity generators operating in the province. This inventory should be developed in tandem with the regulatory requirements under the revised *OEB Act* that retailers file reports and evidence on contaminant emissions, generation processes and fuels burned with the Ontario Energy Board.**
- **MOE should analyze the data on emissions from electric generators to determine air pollution trends, and release an annual report based on its analysis.**
- **MEST should establish measurable goals to encourage reduced consumer energy demand and should clearly support and promote both public and private sector energy efficiency initiatives.**

Ministry of the Environment (MOE)

New law: Bill 82, the *Environmental Statute Law Amendment Act, 1998*

What the law means

This legislation amends the *Environmental Protection Act*, the *Ontario Water Resources Act*, and the *Pesticides Act* to strengthen MOE staff law enforcement capabilities. MOE says that these amendments improve staff's ability to investigate offences and ensure that if prosecution is required, the proper evidence will be available, both to ensure conviction and to increase penalties upon conviction, consistent with other Canadian jurisdictions. The changes also aim at making sure individual rights are safeguarded.

The *Environmental Statute Law Amendment Act* empowers MOE to:

- Seize licence plates and permits from vehicles used to commit environmental offences.
- Apply new administrative monetary penalties (financial penalties imposed by the ministry) for minor environmental infractions. MOE intends to develop regulations that will specify the types of contraventions or failures to which MOE directors can apply penalties and set out criteria for determination of the amounts of the administrative penalties.
- Secure areas and facilities to ensure evidence is protected.
- Extend provisions for control of illegal dumping and cleanup to people who broker illegal waste disposal.
- Streamline the process by which environmental officers issue compliance orders in the field.
- Use more modern investigative aids, equipment and techniques.

The maximum administrative penalty that can be imposed is $5,000 for each day or part of a day on which the contravention occurs or continues. In contrast, MOE can seek fines of up to $100,000 per day from a court under new provisions in the *EPA* if they are able to convict a company. Under *EPA* provisions that were in place prior to Bill 82, MOE can also seek imprisonment. Some commenters argue that the low ceiling of $5,000 for contraventions of environmental laws will be perceived by many companies as "a license to pollute." MOE points out, however, that these small penalties are easier to collect from polluters than large court-imposed fines. In fact, since 1985, the Attorney General has been unable to collect more than $10 million in unpaid fines from convicted polluters. For example, the Attorney General was never able to collect the $3 million fine that was imposed by an Ontario court for a large PCB spill that occurred in 1985 on the Trans-Canada highway near Kenora.

Powers to issue field orders by provincial officers have been expanded. These orders are exempt from notice and comment procedures under the *EBR*, and can be issued by a provincial officer in the field if it is believed that an applicable environmental law or regulation has been contravened. The new powers on orders allow the officer to impose a broad range of remedial measures, including restoration of the natural environment and monitoring and reporting. Since 1995, this power has been delegated to officers in the field by MOE directors. This will mean less bureaucracy, since officers will now be directly empowered to issue these orders.

ECO Commentary

The proposal for Bill 82 was posted for 10 days on the Environmental Registry. When the ECO wrote to MOE, urging the ministry to comply with the minimum posting period of 30 days, the ministry responded that "Bill 82 was before the Legislature for its consideration and, as part of the legislative process, elected members had the opportunity to express their views and provide input on the Bill." MOE also stated that the period for posting "was reasonable to ensure that public comments would be received and therefore could be considered during the Legislative session which ended December 17, 1998."

The shortened comment period was illegal and inadequate, since the *EBR* sets 30 days as the legally required minimum comment period. The ECO has received complaints from members of the public who were deprived of their full opportunity to provide meaningful comment on this complex and controversial change in law. Many industry commenters expressed concern about the shortened comment period. In this case MOE put expediency ahead of the requirements of the law and respect for the public's rights.

Recommendation 28

MOE should ensure that proposals for new laws are given adequate opportunity for public review and comment. This requires that all proposed laws be posted on the Environmental Registry for at least 30 days, as stipulated in the *EBR* , and that longer comment periods be given for more complex proposals.

New regulation: Regulatory Standards for New Landfilling Sites Accepting Non-Hazardous Waste

What the regulation means

Large landfills produce air and water pollutants that can potentially affect land, groundwater and surface waters. These pollutants can be released for several hundred years after the landfill ceases to receive waste. In addition, recent studies suggest that decomposing municipal wastes in landfills produce carcinogenic air emissions. Indeed, Ontario residents frequently raise serious concerns with the ECO related to landfill operations and approvals. Since 1994, I have received more than a dozen applications for investigation and several applications for review related to this matter.

Prior to the enactment of the new regulatory standards and the related guideline, most of the basic requirements for the design and operation of landfilling sites were defined in Ontario Regulation 347 under Part V of the *Environmental Protection Act*. The old regulatory requirements identified general areas of environmental concern which had to be addressed before the Ministry of the Environment issued a certificate of approval (C of A) for a site. Specific details of any potential environmental impacts (e.g., on groundwater or surface water) and how they should be addressed were dealt with by proponents on a site-specific basis in the process of obtaining the approval.

MINISTRY OF THE ENVIRONMENT — REGULATORY REFORM: BETTER, STRONGER, CLEARER?

MOE's thorough review of its own regulations is a missed opportunity to improve Ontario's environmental protection standards by making them tougher, as well as simply making them clearer.

In my 1996 annual report, I pointed out that, as part of Ontario's government-wide "Red Tape Review," the Ministry of the Environment proposed to amend almost every regulation the ministry administers. MOE called its proposal "Responsive Environmental Protection" (REP). In November 1997, after feedback received from more than 125 meetings with stakeholders and 370 written submissions on the proposal, MOE released "Better, Stronger, Clearer: Environmental Regulations for Ontario" (BSC), which is a synopsis of the proposed amendments to individual regulations. The chart in Appendix D provides a summary of all of the amendments proposed to the end of 1998. It also contains the ECO's review of the extent to which the proposals comply with the *EBR*'s goals of stronger environmental protection, a healthful environment for Ontario residents, greater accountability of government decision-makers, and enhanced public participation.

The chart reveals that while some of the amendments proposed in BSC make regulations clearer, very few regulations are made "better" or "stronger." Indeed, in spite of its ambitious title, MOE has not taken advantage of the process of reforming and streamlining regulations to improve Ontario's natural environment at the same time, by strengthening the regulations and standards that should protect our environment.

The amendments to a regulation under the *Energy Efficiency Act* provide a good example of a missed opportunity to improve standards. The amendments strengthen existing energy efficiency standards for water heaters and roadway lighting. They also added minimum energy efficiency standards for three types of equipment not yet covered in Ontario: gas-fired room heaters, wall furnaces and fluorescent lamps. These slight improvements do not tell the entire story, however.

The amendments were intended to bring Ontario into line with international standards, but because the justification for strengthening these standards had to pass the Ontario government's "Red Tape Review," MOE delayed putting them in place for several years after they were originally proposed. In the meantime, the U.S. and the Canadian federal government continued to add more products and strengthen existing standards. Thus, as our discussion of climate change points out (pp. 76-79), Ontario, once considered a North American leader in energy efficiency standards, now lags well behind our closest trading partner, the U.S., in implementing stricter requirements.

Another example of a missed opportunity to improve our environmental performance involves proposed amendments that would consolidate the four "acid rain" regulations. In 1985, these regulations placed limits on the sulphur dioxide emissions of four different industrial producers in Ontario responsible for about 80 per cent of fixed-source sulphur dioxide emissions in the province. The original 1985 emission standards set out gradually declining annual limits for each producer, culminating in 1994. This acid rain program was an example of successful government-industry cooperation in standard-setting and pollution abatement and resulted in environmental improvements to air quality and to Ontario's lakes and forests. Yet scientific evidence shows that acid rain continues to pose a threat to Ontario's lakes and that further reductions in sulphur dioxide emissions are critical.

Currently, however, there is a strong potential for Ontario's acid rain problem to become worse because of Ontario Hydro's plans to replace some of its nuclear-derived energy with fossil fuel-derived energy. Moreover, in my 1996 annual report, I pointed out that MOE's monitoring of the emissions causing acid rain had declined significantly since 1991. Further cuts to MOE staff in 1996 led to decreased monitoring of the recovery of acid lakes and to diminished quality assurance procedures in dealing with the data that are still collected. MOE should have taken advantage of its regulatory reform initiative to further reduce sulphur dioxide emission limits and bolster its monitoring program. Instead, MOE's proposed consolidation will simply merge the four regulations into one, eliminate the abatement schedules that were in place from 1985 to 1994, and reduce industry reporting requirements from quarterly or semi-annually to once a year. Since there are no substantive changes to the emission standards, there are no improvements to air quality in Ontario.

The environmental impact of waste management operations on individuals and neighbourhoods is a concern that members of the public regularly bring to the attention of the ECO. MOE's amendments to Ontario's waste management regulations are summarized in the chart in Appendix D. Under these proposals, eight regulations will be consolidated into one regulation, and certain approvals will be replaced by standardized approval regulations (SARs) and approval exemption regulations (AERs). (See pp. 157-160) Waste management operators will not have to apply for certificates of approval for certain facilities. This means that MOE staff will not be reviewing whether the proposed operations meet required standards. Instead, operators will themselves have to determine whether they comply with the standards set out in the regulations.

Another consequence of the move to SARs and AERs is the elimination of Registry postings on proposed new waste management facilities and with it, the elimination of the opportunity for the public to comment and to appeal approvals granted to waste management operators. The elimination of the *EBR* public participation rights in this highly controversial area will be difficult to explain to Ontario residents. The details of the standards in the SAR and AER regulations for waste management have not been released yet, and the ECO has not been able to determine whether current protections have been strengthened or weakened.

Amendments to nine regulations that are part of the Municipal Industrial Strategy for Abatement program under the *Environmental Protection Act (EPA*) would either reduce the frequency of chronic toxicity (CT) testing of water, or, in some cases, remove the requirement for testing entirely. Part of MOE's rationale for reducing the frequency of CT testing is that in recent years the ministry has not had the resources to do a proper analysis of the CT data which MOE requires that the dischargers provide. However, many scientific experts maintain that seasonal variations in toxicity levels and data needed to study long-term and cumulative effects require frequent CT testing. MOE's proposed approach is to reward "good actors" with reduced reporting requirements, while requiring "bad actors" to continue frequent CT testing, in an effort to strike a reasonable balance between environmental goals and economic objectives.

In some cases, the amendments originally proposed in Responsive Environmental Protection were softened or withdrawn in response to public concerns about environmental impacts. For instance, REP discussed replacing two existing regulations under the *EPA* Regulation 349 (Hot Mix Asphalt Facilities) and Regulation 351 (Marinas) with voluntary codes of practice to be followed by industry operators. Following public criticism, MOE decided to retain the existing regulations and supplement them with the voluntary codes of practice. Likewise, Regulation 361 (Sulphur Content of Fuels) and Regulation 338 (Boilers) were retained by MOE following public criticism of the ministry's earlier proposal to replace them with SARs.

In another example, MOE had proposed in REP to remove certain instruments from its *EBR* instrument classification regulation, which specifies which kinds of approvals and permits must be posted on the Registry for public comment before they can be issued by MOE. As a result of comments received on this proposal, the ministry decided not to remove any instruments from the regulation. Throughout this report the reader will find many examples where ministries listened to public comments, and the result was a different environmental outcome from the original proposal.

Most of the amendments under MOE's regulatory reform will consolidate regulations touching on the same subject matter — "housekeeping" changes to tidy up layers of regulations introduced over a number of decades. But there are very few amendments that strengthen regulatory standards. MOE has not used the opportunity to make needed improvements to environmental protection standards in Ontario.

For many years, the absence of specific regulatory standards was cited by municipalities and private waste companies as adding uncertainty and delay to the approvals process. But there were many reasons for these delays. In many cases, the details of the C of A were determined by the Environmental Assessment Board after a hearing. In addition, the EAB also conducted technical hearings for certain site approvals and public hearings often were held under the *EPA* for some smaller landfill sites and site expansions. Although they dealt

with technical issues, the hearings also provided an opportunity for the public to voice concerns about a particular project. In still other cases, MOE worked with proponents to develop a suitable plan and assisted them in obtaining an approval without an EAB hearing.

MOE claims that the new standards will also "ensure that new landfills in Ontario are second to none in protecting the environment." Although MOE says that it continues to emphasize the 3Rs (Reduce, Reuse and Recycle), the ministry contends that landfills and incinerators are still necessary to manage the residuals of 3Rs processing and wastes that cannot be reused or recycled. According to MOE, the new standards are intended to remove the uncertainty in the current process and decrease the time and cost of establishing the necessary landfill capacity. The new standards attempt to build upon the experience gained with the existing process by codifying many existing approval requirements.

The standards

Some of the new standards apply only in certain circumstances. For example, the requirement for the collection of air emissions from landfills applies only to relatively large sites (i.e., 3 million cubic metres or more). This means that potent greenhouse gases like methane released by smaller sites will not be collected.

In other cases, MOE states that "pre-approved" standards may be unnecessary. For example, sites located in heavy, non-permeable clay can effectively be designed and operated without the engineered liner requirements. Accordingly, MOE states that flexibility is built into the requirements to allow the development of local solutions, provided there continues to be full health and environmental protection.

The final guidelines which accompany the standards clarify that the landfill owner should form a public liaison committee and host meetings regularly during the year, a requirement that codifies provisions often found in most recent certificates of approval for waste sites. The invitation to participate on the public liaison committee is to be extended to nearby residents, and representatives of the local and upper-tier municipalities. Copies of the annual operations report for the site and any submissions to the ministry are to be provided to the liaison committee. In effect, the new standards recognize that public input is important in helping the site operator maintain a commitment to high standards of operation and environmental protection at a site.

Public response to the Registry proposal

MOE received almost 100 comments on the proposed standards. In their comments, stakeholders recommended that some of the detailed provisions be written as guidelines in order to provide the necessary flexibility to consider site-specific conditions. MOE agreed, and indicated that issues addressed by the guidelines will be made enforceable through the certificate of approval required for each landfill. Thus, the landfill standards were finalized as a combination of regulatory requirements and approval guidelines.

Some stakeholders expressed serious reservations about the proposed standards, and these were not reflected in the summary of comments in the Registry decision notice. These concerns included:

- The size of the sites exempted from the proposed standards is too large.
- Some industry stakeholders stated that the standards are too stringent and that, in most cases, detailed reviews of landfill proposals will still be required.
- The public participation component of the proposed standards, as reflected in the requirement that the proponent establish a public liaison committee, is inadequate. The committee was already a requirement contained in most approvals.
- The standards are merely a consolidation of various regulations, guidelines, laws, MOE policy, and EAB jurisprudence. Thus, there is nothing new that would justify changing the current procedures.

MOE says that subsequent to receiving stakeholder comments, extensive discussions were held with major stakeholders to clarify and address their comments, where possible. However, this information was not included in MOE's Registry decision notice.

ECO findings

MOE originally posted a Registry notice about the proposed standards for a 30-day comment period in June 1996, at the beginning of the summer holiday period. A 60-page discussion paper, the result of work carried out by the ministry with technical advice provided by a consultant, was also made available to interested members of the public. MOE agreed to extend the comment period for this proposal to 81 days. This meant that members of the public had a fair opportunity to provide the ministry with their best responses. However, the ministry could have done a better job of explaining the linkages between this initiative and its other related reforms to policies and laws related to landfill approvals, such as environmental assessments and approvals.

New Regulation

O. Reg. 128/98 - Amendments to Regulation 347 (Waste Management), made under the *Environmental Protection Act* (RA7E0012)

What the regulation means

Following a court decision that struck down parts of MOE's previous regulation, this regulation, according to MOE, gives back some of the ministry's authority to regulate certain waste materials. This regulation exempts

companies recycling several kinds of wastes from having to obtain certificates of approval before they carry out their operations. These wastes include solid photographic waste containing silver (when it is being transferred to a site where silver is recovered); chop line residues transferred by a generator and transported directly to a site at which it is to be processed for recovery of metal and plastic (chop line residue is residue remaining after metal is recovered from wire and cable, and it contains polyvinyl chloride, lead and cadmium); and spent pickle liquor (where it will be used as a treatment chemical in a sewage or wastewater treatment plant). An exemption similar to this one allowed Plastimet, a waste recycler in Hamilton, to stockpile large quantities of polyvinyl chloride (PVC) wastes without having to obtain a certificate of approval from MOE.

New Regulation

O. Reg. 50/98 - Amendments to Effluent Monitoring Limits in O.Reg. 63/95, Municipal Industrial Strategy for Abatement (MISA) Organic Manufacturing Sector

What the regulation means

The regulation increases effluent loading limits for specified plants of several chemical, rubber, and vinyl manufacturing companies on a facility-specific basis. The companies include Bayer Rubber Inc., Dow Chemical, Ethyl Canada Inc., G.E. Plastics, Geon Canada Inc., Imperial Oil Chemicals, Nova Chemicals, and Cornwall Chemicals. The new regulation will allow these companies to increase production of the goods they manufacture.

The amendments allow the companies to increase discharges of pollutants such as nitrogen compounds, suspended solids, phosphorus and dissolved organic carbon. According to MOE's Registry posting, the implementation of the amendments will not adversely affect the environment. Legal requirements will continue to ensure that effluents are not so concentrated that they kill fish or small aquatic animals outright.

MOE received five comments from some of the affected companies supporting the amendments or requesting increases to some of the loadings. In most cases MOE agreed to increase the loading limits as requested. But not all the comments supported this direction. For example, the Chair of the Niagara River Restoration Council stated that the amendments were inappropriate because at one location the water body receiving the additional pollution is already overloaded with phosphorus, which acts as a fertilizer, increasing plant growth and ultimately using up the oxygen fish need to stay alive. MOE did not provide the public with information on existing pollution loadings for these waterbodies or explain how the regulation would change overall pollution loadings.

MOE's decision on this regulation appears to contradict the principles of preventing pollution and minimizing the creation of pollutants that can damage the environment set out in its Statement of Environmental Values under the *EBR*. (See details, next page.)

SEV CONSIDERATIONS

Ministries prescribed under the *EBR* are required to consider their Statements of Environmental Values (SEVs) whenever they make an environmentally significant decision. In order to assist me with my reviews of ministry decisions, I regularly request documentation from ministries on how they considered their SEVs in making these decisions. The following is the verbatim report of how the Ministry of the Environment considered its Statement of Environmental Values in making its decision to increase effluent limits for chemical and rubber plants in Ontario. *Italics added for emphasis.*

Decision: Proposed amendments to the Effluent Monitoring and Effluent Limits - Organic Manufacturing Sector — O.Reg. 63/95.

Ecosystem approach: Within the context of the impact of discharges on aquatic organisims and human health, this amendment will not alter the loading limits for toxic contaminants discharges to Ontario's waterways. *The implementation of the amendment will not impact the economic position of the sector.*

Environmental protection: The amended limits are set on the basis of performance of Best Available Technology applicable to each facility. This will encourage the sector to use pollution prevention principles to meet the new limits. This will enhance the Organic Manufacturing Sector regulation providing further protection to the environment.

Resource conservation: The use of loading limits will encourage the industry to implement water conservation measures through recycling techniques. This amendment will not alter the level of performance which was chosen to serve as the basis for the limits. To meet the requirements of the amendments, plants will have to place priority on pollution prevention.

Public consultation: The Ministry has consulted and will continue to consult with industry. The Ministry is committed to public participation and will continue to foster an open and consultative process when finalizing the amendments. Extensive public consultation was conducted during the development of the original regulation.

Other considerations: *The proposed changes to the regulation will allow for business growth within the sector.*

ECO Comment: The ministry has placed an inordinate amount of reliance on Part V of its SEV, which requires it to take into account social, economic and other considerations, without considering its other commitments, such as pollution prevention. MOE is clearly more concerned about business growth within the sector.

Ministry of Municipal Affairs and Housing (MMAH)

New Law: *Greater Toronto Services Board Act, 1998*

What the new law means

The GTA is comprised of the City of Toronto and the Regions of Durham, Halton, Peel and York. The Greater Toronto Services Board (GTSB) includes representatives from 29 local municipal councils that make up the GTA. The GTSB could require member municipalities to contribute to the cost of its operations, and would have a subsidiary body, the Greater Toronto Transit Authority (GT Transit), which would assume operation of GO Transit. The Region of Hamilton-Wentworth is included in the GTSB only with respect to GO Transit.

The GTSB will provide advice to municipalities on transportation, infrastructure and services for the people of the GTA. It will be able to consider matters across the GTA in a manner that would not be constrained by municipal boundaries. According to MMAH, it should provide a forum for promoting better coordination and integration of inter-regional services in the GTA and result in a reduction of waste and duplication.

Ministry of Natural Resources (MNR)

New Law: Bill 25, Schedule I - MNR *Red Tape Reduction Act, 1998*

What the law means

Changes to the *Public Lands Act (PLA)* allow the minister to transfer administration and control to an agent corporation, the federal government, another Ontario ministry or an Ontario Crown agency, potentially reducing MNR's responsibility to manage public lands. Authorizing the delegation of these environmental decisions to external organizations is of concern, since public oversight of such delegation is not addressed in the provisions. The concern is that the public will have difficulty understanding who is accountable for decisions made under these new provisions.

New provisions of the *PLA* allow the minister to designate any area of public land as a planning unit and to require that a land use plan be prepared for that planning unit in accordance with guidelines approved by the minister. These amendments are intended to introduce a land use planning process that involves the participation of stakeholders and creates a forum to resolve objections and to control activities that may be inconsistent with approved land use plans. These new provisions will be used by MNR in the future in the Lands for Life planning process.

Amendments to the *Conservation Authorities Act* allow conservation authorities to enter into agreements permitting exploration, storage and extraction of gas and oil resources owned by the conservation authorities, and agreements for sharing revenues.

New Regulation

O. Reg. 828 made under the *Niagara Escarpment Planning and Development Act* (*NEPDA*)

What the proposed new regulation means

The proposed amendment would increase the number of activities exempted from development permits under the *NEPDA* from 19 categories to 35 categories.

A number of residents concerned with the Niagara Escarpment commented on this Registry proposal and raised some important issues.

- Concern was expressed about a provision allowing up to 10 per cent of all trees to be cut up without a development permit, on a lot greater than .8 hectares in area. This provision does not provide a minimum time period over which the trees could be cut, potentially allowing a much larger cutting to occur over a short period of time, contrary to the purpose and objectives of *NEPDA* and the Niagara Escarpment Plan. It also does not require a permit or any advice from a responsible agency, forester or ecologist. It was suggested that a 10-year cutting period cycle, with professional consultation with forest ecologists, would be more acceptable.
- Concern was also expressed about the proposed exemption for extensions to single dwellings, particularly the omission of a size limit.

As a result of the proposed amendments, property owners in the Escarpment could have fewer opportunities to be notified of activities occurring on nearby properties.

New Regulations passed under the *Fish and Wildlife Conservation Act (FWCA)*

These regulations are required to implement the *FWCA.*

What the proposed regulations mean

MNR says that there are no significant changes in intent or direction from the existing regulatory regime. The main purpose is to consolidate more than 60 existing regulations under the *Game and Fish Act* (which were repealed when the *FWCA* was proclaimed on January 1, 1999) and to implement changes made within the *FWCA*. Although MNR states that numerous adjustments and improvements were made to the final regulation based an all input received as a result of the *EBR* postings, MNR appears to have missed an opportunity to strengthen and improve significantly its wildlife protection policies through these regulations.

While MNR made extensive efforts to encourage public comment on these proposed regulations, its Registry posting methods for this regulatory package resulted in some commenters asking for more information. First, MNR posted an information proposal in January 1998, indicating that MNR intended to prepare regulations associated with the new *FWCA*. It stated that opportunity to comment through the Environmental Registry would "be provided at the time that details of the proposed regulatory changes are available." In June, MNR posted eight proposals for new regulations, but did not provide an opportunity for the public to see the actu-

al text of the regulations. After concerns were raised by various groups, the proposal was altered and re-posted on July 16, 1998, the final day of the comment period for the June 1998 Registry posting. In the end, MNR responded to the public demand and agreed to release the draft text of the proposed regulation, and extended the public comment period.

Ministry of Northern Development and Mines

New Regulation

O. Reg. 356/98 made under the *Mining Act*, regarding the staking of mining claims in environmentally sensitive areas of Ontario

What the regulation means

This regulation modifies staking practices so as to minimize the impact of staking of mining claims in environmentally sensitive areas. Measures in the regulation include prohibitions against blazing trees and cutting, pruning or delimbing trees for staking purposes.

This regulation was developed as a result of a land use strategy developed for the Temagami Planning Area by a local planning council and adopted by the provincial government. The strategy identified certain areas that required special staking and exploration requirements to mitigate environmental impacts. Although originally developed for Temagami, this regulation will be applied to other areas in Ontario that warrant similar cautions. Similar regulations governing mineral exploration were developed by MNR under the *Public Lands Act*.

Standardized Approval Regulations

To reduce "red tape" and to lessen its workload, MOE is introducing a new system of approvals for certain kinds of activities that the ministry has declared to be less environmentally risky.

Over the past three years, I have been monitoring the Ministry of the Environment's progress toward introducing a new regulatory system of standardized approvals, beginning with MOE's proposal for the *Environmental Approvals Improvement Act* in 1996. The goal of MOE is to reduce "red tape" — and thus to lessen its workload — by eliminating the need for certificates of approval for certain kinds of polluting activities in order to concentrate its efforts on more serious polluters.

In February of 1998, MOE posted a notice on the Registry proposing standardized approval regulations (SARs) and approval exemptions regulations (AERs). The decision regarding the AERs portion of this proposal was posted October 6, 1998. The ministry has indicated that it will make a decision regarding SARs in 1999.

Under the SARs system, MOE makes a regulation that sets out a series of conditions that a person or company must follow. The person must notify MOE of the activity being carried on, and certify that the processes or equipment fits squarely within the conditions set out in the regulation. An operator who uses the pre-

approved equipment or process in accordance with the regulations will not be required to obtain a separate written MOE approval. This marks a shift in MOE's approach from a "permission" requirement to a "reporting" requirement.

According to MOE, SARs apply to processes and equipment with well-understood, predictable emissions that carry low risks. There has been only one set of proposed SARs posted on the Registry: a series of waste management SARs as part of the proposed consolidation of waste management regulations under the *EPA* (for further information on this issue, see the discussion of product stewardship, p. 118).

In the case of approval exemptions, there is no notification requirement. The company must simply determine whether the process or equipment being used fits the conditions in an approval exemption regulation. AERs apply to processes and equipment that MOE says have minimal environmental impacts. The two AER regulations finalized by MOE in October 1998 — one for air emissions under the *Environmental Protection Act* and another for water and sewage works under the *Ontario Water Resources Act (OWRA)* — applied to activities like fuel-burning equipment of a certain size used to provide comfort heating in a building, and the replacement of an existing watermain or sewer with one of similar dimensions and performance criteria. Examples of activities from a further set of AERs proposed in December 1998 include: emissions from the grounds of racetracks and fairs; equipment used for ventilating vehicles and forklifts in enclosed storage areas; changes in water works; and water takings used to cope with an emergency under the *Emergency Plans Act*.

MOE's investigation and enforcement powers remain the same — MOE may prosecute a person or company that is not in compliance with a SAR or an AER.

MOE states that SARs and AERs are intended to reduce the amount of resources devoted by both the ministry and by the private sector to the issuing of certificates of approval for relatively trivial activities with little or no environmental impacts. The concept is simple, but in practice it is difficult to create categories of approvals instead of treating every polluter on a case-by-case basis. The ministry is wise to proceed with caution in the implementation of SARs to avoid the risk of compromising environmental protection.

Because companies will no longer have to obtain individual approvals for activities covered by SARs and AERs, the public will lose its *EBR* rights to be notified of and to comment on applications for these instruments. The public will also lose its rights to appeal or to seek reviews or investigations of the instruments. (However, applications for investigation could still be made in cases where the requirements of SARs were being contravened.) It will be difficult to explain to members of the public, when they contact the ECO, why they have lost the right to comment on proposals for facilities that are exempted from certificate of approval requirements.

I have asked MOE to inform me how many instruments will be removed from *EBR* Registry posting requirements by the existing and proposed SARs and AERs, and also what percentage of the total number of *EBR* prescribed instruments will be affected. MOE has not provided this information.

MOE received 65 comments on the Registry notice describing the SARs and AERs.

Commenters from industry were unanimously in favour of the proposed regime since it would reduce requirements to obtain MOE approvals. There was criticism, however, about the requirement that a professional engineer certify compliance with the technical provisions of a SAR. Any competent person, according to industry commenters, should be allowed to make such a certification. Other commenters said industry should have a voice in determining which kinds of activities and processes qualify for SARs and AERs.

Several people commenting on the proposal noted there were no details on how MOE would enforce compliance with regulatory standards and how MOE's staff and resources would be re-allocated to handle inspections and audits. The shift to SARs and AERs is essentially a move toward industry self-monitoring and reporting, and it will be essential to have an effective auditing system in place. The challenge ahead will be to ensure that standards will be enforced and that certificates of approval will not be eliminated for activities causing adverse effects. MOE says that it has established a working group to develop compliance and enforcement procedures for SARs.

Another commenter asked whether the statutory authority provided to activities that fall under a SAR will impinge on the public's right to bring civil actions in nuisance. Under the common law, a person may not bring a court action to stop another person from carrying out an activity that is causing a nuisance if the legislation permitting the activity confers statutory authority to impinge on private rights. For example, the *OWRA* extends such authority to sewage works that have been constructed in compliance with the *OWRA* and the *EPA*. Other commenters were concerned that there is no flexibility that would allow MOE to impose

Can the Public Influence Decisions?

Onaman Lake Fisheries Management Plan

Registry # PB7E1002

description The Ministry of Natural Resources decided to develop a Fisheries Management Plan for Onaman Lake, east of Lake Nipigon, after signs began to point to a steady decline in the lake's walleye population. Even though it has no road access, the lake supports three tourism camps and a commercial whitefish fishery. Many anglers cache boats on the shore, some illegally. MNR set up a fisheries management planning team made up of ministry staff and interested local people. In consultation with the public, the planning team identified several options for managing the fishery: closing the fishing season during late winter and early spring to protect spawning fish; reducing the existing limit of six fish per day per angler; increasing enforcement on the lake; removing illegally cached boats; and collecting baseline data on fish populations, with follow-up monitoring at five years and again at 10 years. The planning team consulted with the public at several stages before recommending a final fisheries management plan. Each stage included a new posting on the Environmental Registry.

public comments Although some people felt there was insufficient data to prove a decline in fish populations, public comments in general supported the planning team's proposals to limit the fishing season and to reduce the number of fish taken per day. Several people also suggested that the increasing numbers of cormorants and pelicans at the lake might be partly responsible for the fishery's decline.

decision The final Onaman Lake Fisheries Management Plan was shaped in great part by comments from the public. MNR closed the fishing season at the lake from March 1 to June 1, the per-day limit of fish was reduced from six to four, and the ministry increased enforcement on the lake. If funding becomes available, MNR also committed to studying the impact of birds on fish populations. As well, the ministry decided to discontinue using Onaman Lake as a donor lake from which walleye and walleye eggs could be taken to stock other lakes.

Can the Public Influence Decisions?

Stock Car Racing Track

Peterborough
Registry # IA7E1589

description A company asking for approval to operate a stock car racing track in Cavan Township (near Peterborough) said it would build noise barriers around the track, fit all cars with racing mufflers, and operate the track within specified hours.

public comments Over 200 people, concerned about excessive noise and air contamination, commented on this application, and all were in opposition to the race track.

decision The Ministry of the Environment reviewed the company's proposal and asked them to provide more information about the air contaminant emissions it would produce. When the company failed to provide the information, MOE refused to approve their application, and it was withdrawn. However, in December 1998, MOE posted a proposal on the Registry (RA8E0036) to amend a regulation so that racetracks would be exempted from having to get approvals for air and noise emissions, if the company meets certain preset conditions. MOE explained in the posting that the exemptions would cover activities that have insignificant environmental impacts or that could be addressed through local by-laws. MOE wrote to local residents opposed to the Peterborough stock car racing track, explaining that if the regulation passed, the track would no longer require approval from the ministry.

conditions on facilities in compliance with the SARs but creating a nuisance for neighbours.

Recommendation 29

MOE should develop a "bump up" provision that would allow residents to request that MOE require a certificate of approval for certain proposed activities normally governed by SARs.

Recommendation 30

MOE should regularly post an annual information notice on the Registry providing a list of proponents who have provided notice to the MOE of their reliance on one or more SARs as the basis for their operations.

Unposted Decisions

Over the past two years, the number of times ministries failed to post environmentally significant decisions on the Environment Registry for public comment has continued to decline.

Public participation in environmental decision-making is at the heart of the *Environmental Bill of Rights*. When it comes to our attention that ministries have not posted proposals on the Environmental Registry that are potentially environmentally significant, we review them to determine whether the public's participation rights under the *EBR* have been respected. Some of these decisions are subsequently posted on the Registry in response to the ECO's inquiries, hence the public's rights of notice and comment are restored. In other cases the ministry responsible conveys to the ECO a legitimate rationale for not posting the decision on the Registry (for example: the decision is not environmentally significant; the decision is not made by a ministry but by a related non-prescribed agency; or the decision falls within one of the exceptions in the *EBR*). And finally, in some instances the ECO disagrees with the ministry's decision not to post a proposal. The chart in Appendix E contains examples of each of these types of "unposted" decisions, the rationale provided by each ministry for not posting them on the Registry, and a brief commentary by the Environmental Commissioner of Ontario.

The Ministry of Municipal Affairs and Housing fell short of its obligation to post proposals and decisions several times during 1998. MMAH issued a series of

regulations amending various Minister's Zoning Orders under the *Planning Act*. None of these regulations have been posted on the Registry, despite the requirement to do so under the *EBR*. MMAH has not provided an adequate reason for this omission. In addition, MMAH did not post any notices on the Registry regarding its implementation strategy, under the *Planning Act*, of delegating minister's approval authority to municipalities and exempting municipalities from provincial approval for official plan amendments. Nor did the ministry post any notices announcing the specific delegations or exemptions it has allowed under the implementation strategy.

In March 1998, the Ministry of Health released a set of mandatory guidelines for health programs and services delivered by local boards of health. (This is discussed further in the ECO's review of MOH's Statement of Environmental Values, p. 12). MOH claimed it was not necessary to post the guidelines on the Registry because they were not environmentally significant. Its focus, said the ministry, is on protecting and promoting individual health, and not on environmental protection. The ECO believes that this approach is too narrow, since it ignores the impact of environmental quality on public health. Some of the objectives stated in the MOH guidelines could be advanced through enhanced environmental protection. Also, the guidelines include some environmental health objectives — for example, monitoring drinking water quality for water-borne pathogens and sampling water at beaches. MOH should adopt a more expansive view of the environmental significance of much of its work and of the close links between environmental quality and public health.

The Ministry of Natural Resources failed to post on the Registry its agreement with the Ontario Commercial Fisheries Association (OCFA). Under the agreement, OCFA assumes a major role in four areas of commercial fishery management: record-keeping of commercial fish harvests, administration of royalties, compliance monitoring, and data collection. MNR claims that the agreement is unlikely to result in any significant impacts on the environment and thus was not required to be posted on the Registry. The ECO does not accept this rationale and believes that this decision should have been subject to public notification and comment, not only because of the potential environmental impacts of MNR's relinquishing part of its role in fisheries management, but also because of the potential for conflict of interest for OCFA.

Reviews and Investigations

Members of the public can use the *EBR*'s application process to urge ministry action they believe is needed to protect the environment.

Under the *Environmental Bill of Rights*, Ontario residents can ask government ministries to review an existing policy, law, regulation or instrument if they feel that the environment is not being protected. Residents can also request ministries to review the need for a new law, regulation or policy. These are called applications for review.

Ontario residents can also ask ministries to investigate alleged contraventions of environmental laws, regulations and instruments (such as certificates of approval or permits). These are called applications for investigation.

The ECO's role in applications

Completed applications for review or investigation must first be submitted to my office. My staff review the applications for completeness, and then forward them to the appropriate ministry or ministries. Ministries then must decide whether or not they will conduct the requested review or investigation. I review and report on how the ministries receive and handle applications. This year I reviewed 42 applications (see Appendix F), including some that had been submitted in previous years.

Of the 13 government ministries subject to the *EBR*, members of the public can submit applications for review and investigation to the Ministries of the Environment, Natural Resources, Northern Development and Mines, and Consumer and Commercial Relations, and Energy, Science and Technology. The Ministries of Agriculture, Food and Rural Affairs and Municipal Affairs and Housing, are required to consider only applications for review

(not investigation). During 1998, members of the public submitted applications to MOE, MNR and MMAH.

The total number of applications submitted over the past three years has remained fairly constant, with 30 submitted in 1998, 26 in 1997, and 27 in 1996. Of the 30 applications submitted in 1998, I forwarded 18 applications to MOE, 10 to MNR and two to MMAH. During 1998, in a departure from previous years, when the majority of applications were denied by all ministries, MNR accepted more applications than it denied, undertaking six of the eight investigations I forwarded to the ministry, and took action as a result of some of these investigations. MOE undertook no reviews and three investigations (several *EBR* investigations were denied because MOE said it was already investigating the issues raised in the applications, or because another ministry — usually MNR — was investigating similar allegations).

MOE	Reviews	Investigations
Total forwarded to ministry	**5**	**13**
Undertaken and completed	0	1
Undertaken but not yet completed	0	2
Denied	5	10

MNR	Reviews	Investigations
Total forwarded to ministry	**2**	**8**
Undertaken and completed	0	6
Denied	2	2

MMAH	Reviews
Total forwarded to ministry	**2**
Denied	2

Applications topics in 1998

During 1998, applications were submitted from locations across Ontario on a wide range of topics. As in previous years, I received several applications related to waste disposal sites. Applicants raised concerns about inadequate certificates of approval for landfills in Thunder Bay and Sarnia, and about a recycling facility near Aylmer, Ontario. Several forestry-related applications raised concerns about forestry operations taking place in areas where harvesting had not been approved. Destruction of common tern nests on Toronto's Leslie

Street Spit was the subject of another application. Other issues included discharges from a mine on Graphite Lake, near Algonquin Provincial Park, and a conservation authority's decision to sell some waterfront land in Pickering. Several applications are discussed in greater detail on the following pages.

WATERSHED MANAGEMENT

Clarington

The ECO received applications in late 1997 requesting that the Ministries of the Environment, Natural Resources, and Municipal Affairs and Housing review the need for a watershed management plan to protect the Farewell and Black Creeks, which are located in Clarington, a rapidly developing municipality east of Oshawa. The applicants were concerned that new housing developments in the watershed were degrading fish habitat and water quality and quantity in these creeks. The applicants were also concerned about degradation of Second Marsh, a provincially significant wetland into which these creeks flow. They noted that a watershed management plan was required to address the cumulative effects of development in the watershed.

All three ministries decided not to conduct reviews, primarily on the basis that watershed management is a locally initiated process. Although the ministries were justified in denying the reviews for this reason, they should have provided the applicants with additional information in several cases. For example, none of the ministries clearly explained their roles in watershed management planning. To its credit, MNR sent the applicants a copy of a 1997 government report on watershed management in Ontario, but failed to indicate to the applicants whether progress had been made on some of the commitments made by the ministries in that document.

Some of the information provided to the applicants and parts of MNR's rationale for denying the application were poor. MNR considered the potential for harm to the environment if the review was not undertaken, and concluded that a review of the need for a new policy requiring a watershed management plan was not warranted on this basis. However, in a letter sent to the Region of Durham just prior to MNR's denial of this application, MNR notes that the entire Black/Farewell watershed "has suffered a gradual degradation of environmental quality" and suggests that "it would be appropriate to undertake the preparation of ...a watershed plan before any further large scale development is approved." In the interests of transparency, MNR should have acknowledged that the ministry has concerns about the lack of watershed management planning in Clarington. MNR should also have acknowledged that a watershed management plan was initiated for the Black/Farewell watershed by the local conservation authority and the Town of Clarington, but that it was stopped because of lack of funds. MNR also should have indicated to the applicants whether or not it provides funding for conservation authorities to undertake watershed management planning.

In reviewing ministry initiatives in watershed management planning, my staff found that MNR, in partnership with MOE and MMAH, is providing some technical assistance on watershed management planning — mostly in the form of documents, guides and reports — to municipalities and conservation authorities. However, only very minimal financial resources are being provided. MNR and MOE should consider providing more substantial funding for local watershed management planning initiatives, particularly in areas such as the Farewell and Black Creeks, where these ministries feel strongly that watershed management planning is needed.

Recomendation 31

MNR and MOE should consider providing more substantial funding for local watershed management planning initiatives, particularly in areas where these ministries have identified environmental concerns and the need for watershed management planning.

Successful applications in 1998

I am pleased to report that ministries, and the Ministry of Natural Resources in particular, took action to address some of the concerns raised in applications in 1998. MNR conducted an investigation in response to an application alleging that a forestry company was building roads in an area adjacent to Pukaskwa National Park that had not been approved for forestry. MNR ordered the company to halt forest operations in the unapproved area, and fined the company for building the illegal road.

In 1998, MNR also investigated allegations that a forest company cutting in the Algoma Highlands cut trees to the edge of streams, cut in "no disturbance" zones, and piled debris on top of streams, all in contravention of MNR's rules and laws for harvesting forests on public land. The MNR team conducting the investigation confirmed many of the violations described by the applicants. The team recommended enforcement action in three instances. The investigation report also recommended that MNR develop clearer guidelines to protect small streams and that MNR staff and industry be trained on the rules covering road access and water crossings. (For more information on this application, see Appendix F.)

How investigations were handled

The quality of ministry responses to applications varied considerably. Some ministries provided very thorough reports. For example, MOE provided a thorough report to applicants concerned about vibration from the Ford Motor plant in Windsor, giving background information and a good description of MOE's investigation of the allegations. In addition, MOE sent the applicants a copy of the ministry's technical report of the investigation. MNR's reports outlining the outcome of their investigations of allegations of illegal forestry activities in Algoma were also clear and comprehensive.

However, some ministry responses to applications were poor. In several cases, ministries provided weak reasons for not conducting a review or investigation, or failed to provide adequate information to back up their reasons. For example, MOE's rationale for denying a well-organized and extensive application for a review of hazardous waste management was poorly explained. Although MOE provided adequate reasons for not reviewing a few of the issues raised in the application, for many other issues, the ministry's rationale was weak and failed to address evidence and concerns raised by the applicants.

In another case, MOE denied a request for a review of the ministry's decision to chlorinate the Town of Milton's drinking water. The applicants were concerned about health effects of chlorinated compounds. To support its claim that the possibility of chlorinated compounds forming as a result of chlorinating groundwater supplies (which Milton uses) is low, MOE should have provided the applicants with information on the levels of chlorinated compounds found in the town's drinking water after chlorination began.

MOE and MNR both denied requests for investigation relating to discharges from a closed graphite mine near Algonquin Park, in part because the ministries (in conjunction with MNDM and the federal Department of Fisheries and Oceans) were taking some action (developing a mine closure plan and issuing a field order) relating to the mine. However, the responses of both ministries were too brief to provide certainty that their actions would address all of the applicants' concerns.

In other cases, ministries failed to provide applicants with information on current ministry initiatives related to the applicants' concerns. For example, MOE denied a request to review a certificate of approval for a waste disposal site in Thunder Bay, and failed to inform the applicants that the approval was about to be reviewed at the request of the company and that the applicants could comment on the proposal, which would be posted on the Environmental Registry. In a similar situation, MOE failed to inform applicants requesting a review of a certificate of approval for a Sarnia landfill that a new certificate of approval for the site had been posted for comment on the Registry.

With a couple of exceptions, ministries met all of the *EBR*'s procedural requirements for receiving and handling applications, although in a few cases, ministries exceeded the timelines set out in the *EBR* for notifying applicants about the status of their applications.

Quality of applications in 1998

The quality of the applications members of the public submitted during 1998 varied. Some applications were very focussed and well-organized, and were supported by good evidence. However, several applications did not clearly indicate what the applicants wanted the ministry to review, or how an Act or permit had been allegedly contravened. When preparing applications, applicants should provide as much detail and supporting evidence as possible, and should clearly indicate what they are asking the ministry to review and why (for reviews), or how an Act, regulation or instrument may have been contravened (for investigations). Applicants should ensure that evidence in applications is factually correct, and that applications for investigation are submitted in a timely manner. Strong, clear applications have a greater likelihood of being seriously considered by ministries.

Providing an impartial perspective on applications

In my 1997 annual report, I encouraged ministries to assign the decision for undertaking a review or investigation, as well as the review or investigation itself, to a branch or person without previous involvement or a direct interest in the particular issue of concern, in order to obtain a fresh and impartial perspective. Although most ministry decisions on applications in 1998 appear to have been assigned to an appropriate person, a few applications could have benefitted from a fresh perspective. In response to my 1997 recommendation, several ministries indicated that, where needed, they will consider assigning applications to persons without a direct interest in the issue, although due to the technical nature of some applications, and the relatively short legislated timeframes for these activities, this would not alway be possible. MNR noted that it has redesigned its decision-making process for reviews and investigations so that decisions involve senior staff who have no direct interest in the issues or programs raised by applicants. In one case, MNR assigned an independent team of its staff to investigate illegal forestry operations in Algoma. If circumstances dictate, MNR will consider assigning the responsibility for carrying out reviews and investigations to persons not employed by MNR (e.g., the Mining and Lands Commissioner). I hope that these commitments by MNR and the other ministries will ensure that decisions on future applications are appropriately assigned.

Recommendation 32

Ministries should ensure that their responses to applications provide thorough rationales, and include any available information that would assist the applicants in resolving their concerns or in understanding the response to their application.

Recommendation 33

Ministries should ensure that their responses to applications include information about current Registry postings and other public consultation opportunities that relate to the stated concerns of the applicants.

UPDATE ON THE LYNDE SHORES MARSH ECOSYSTEM

In 1997, an application under the *EBR* requested that the Ministry of the Environment review an existing policy, as well as the need for a new policy, to protect the Lynde Shores Marsh ecosystem, a Class I wetland on the shore of Lake Ontario, from a nearby housing development.

The policy cited by the applicants was the Environmental Management Plan (EMP) for the housing development, approved by the Minister of the Environment in 1991. The EMP was a condition for exempting the housing development from a full environmental assessment, but the applicants felt that the policy explicitly permits negative environmental impacts.

MOE decided not to conduct the review because the EMP is not a policy but an instrument approved under the *Environmental Assessment Act*, and is thus not open for review under the *EBR*. The ministry also provided the following reasons for not reviewing the need for a *new* policy, Act or regulation:

- The decision-making that led to the approval of development in the area followed the processes of the day and participants in the decision-making had due regard for the well-being of the marsh.
- Other agencies can be utilized to ensure that implementation of the EMP takes place.
- There are other activities currently under way that may assist in resolving the matter, and an *EBR* review may duplicate the time, cost and resources to carry out these activities.

In spite of denying the application, MOE then asked another agency, the Waterfront Regeneration Trust, to investigate options to improve the protection of the marsh. The Trust completed its report in March 1998.

The Waterfront Regeneration Trust considered three strategies to improve the health of the marsh:

- Restrict development within 500 metres of the marsh
- Expropriate the proposed housing development lands
- Implement a program to increase the health of the marsh

The Trust held consultations involving the following stakeholders: Save Lynde Marsh, Lynde Shores Properties Corporation, The Town of Whitby, Central Lake Ontario Conservation, and various provincial ministers and their staff.

Following their public consultations, the province asked the Waterfront Regeneration Trust to investigate the third strategy further. The Trust developed a large number of proposed measures to improve watershed health and natural area and recreation linkages. The Trust stressed that the proposed measures are interdependent and complementary, and that, taken alone, no single action would significantly

improve environmental health. The Trust noted that restrictions on development of the land adjacent to the marsh would increase the natural area's land base, while watershed stewardship and careful management of recreation activities would ensure the long-term health of the area.

The Trust proposed a wide range of implementation partners: the Province of Ontario, Region of Durham, Town of Whitby, Central Lake Ontario Conservation Authority, Lynde Shores Property Corporation, Whitby Shores residents, other landowners, Save Lynde Marsh, Marsh for Life, Service Clubs, other community groups, Ducks Unlimited, World Wildlife Fund, Nature Conservancy of Canada, other conservation/environmental groups, and educational institutions.

The partners listed above, said the Trust, should participate in a community fundraising campaign to complement the allocation of resources by the province.

In October 1998, Minister of Labour Jim Flaherty, MPP for the riding of Durham Centre in which the Lynde Marsh is located, advised me that the Natural Areas Protection Program had committed a total of $20 million to the Rouge Valley, the Niagara Escarpment and the Lynde Marsh. The funds for Lynde Marsh, according to Minister Flaherty, will be used to acquire lands adjacent to the existing Lynde Marsh Conservation Area, doubling its size. The minister is working with the local community to develop the Lynde Marsh Alliance, which will be responsible for deciding how money will be allocated for land acquisition, fundraising and partnership development. The Ministry of Natural Resources will be linked to the Alliance through a memorandum of understanding.

The solicitation of expert opinion regarding the protection of the Lynde Shores Marsh ecosystem by the Ministry of the Environment is a positive development for the preservation of the Marsh. MNR, the Ministry of Municipal Affairs and Housing, and Management Board Secretariat also participated in the process and implementation efforts. I look forward to continued reports on the successful implementation of protective measures.

Hazardous Waste Management in Ontario:

An Application under the *EBR*

Hazardous wastes are those wastes that have been determined to carry the greatest risk of harm to the environment and to human health. Current rules governing hazardous wastes in Ontario focus on minimizing their damaging effects. In contrast, MOE's SEV states that the ministry will place first priority on preventing pollution. MOE has not made good on its SEV commitment to pollution prevention, and has instead indicated that it hopes to achieve pollution prevention through volunteer initiatives the ministry is promoting to industry.

A recent application for review under the *EBR* raised many serious questions about MOE's hazardous waste management rules. MOE has not adequately replied to many of the issues raised. The ECO review found that improved databases and better public reporting are needed to determine if MOE's chosen strategies to contain hazardous waste are succeeding.

Application submitted on hazardous waste

In February 1998, the Canadian Institute of Environmental Law and Policy (CIELAP) published a wide-ranging report on hazardous waste management in Ontario. CIELAP submitted the report as an application for review under the *Environmental Bill of Rights*. The report raised many concerns about the adequacy of information gathering and public reporting on hazardous wastes by the Ministry of the Environment. It also stated that there was not enough regulatory emphasis on pollution prevention and waste reduction in Ontario. The report also raised concerns about the disposal of hazardous wastes into sewers and waterways.

The report, and the application, made numerous recommendations for overhauling Ontario's regulatory framework for hazardous wastes. Many recommendations asked for more stringent pollution controls in specific areas, such as tighter emission standards for incinerators, bans on certain types of waste disposals, and tougher rules for the recycling of hazardous materials such as batteries and waste oil. Other recommendations focused on strengthening monitoring and reporting requirements for various types of hazardous waste.

The CIELAP report also recommended that Ontario should enact a Pollution Prevention Planning Act, along the lines of legislation adopted by several U.S. states such as Massachusetts and New Jersey, which require facilities to develop pollution prevention/toxics use reduction plans. According to the CIELAP report, these states have achieved significant reductions in the use and release of toxic substances and cost savings to the firms that are involved.

Some background: What is hazardous waste?

Our society produces a huge variety of substances that can loosely be described as hazardous waste. The list is almost endless: Industries of all kinds produce waste solvents, waste acids, waste oils, and a host of other waste materials. Periodically, every car owner has to discard lead-acid batteries, lubricating oil and antifreeze.

Hospitals and medical offices have to dispose of anatomical wastes, contaminated waste materials and waste drugs. Farmers, many businesses, and homeowners need ways to deal with waste pesticides and pesticide containers. Buildings and equipment containing asbestos or PCBs also need special waste management. Typically, wastes are considered hazardous because they are either toxic, ignitable, corrosive, radioactive or likely to spread disease.

In Ontario, hazardous wastes are managed and disposed of in many different ways, and there is often great controversy about the environmental safety of various disposal methods. Some wastes are collected and buried in special landfills. Some are exported to other jurisdictions, usually New York or Michigan. Solvent and oil wastes are often burned as fuel, or incinerated. Biomedical wastes are usually incinerated. Hazardous wastes from industry and homes find their way into municipal sewers and sewage treatment plants. Still others may be released directly into lakes and rivers. Some liquid wastes are applied to rural roads as dust suppressants. In cases where disposal methods are particularly controversial, hazardous wastes may end up in long-term storage sites, such as PCB storage sites.

Some types of hazardous wastes lend themselves to reuse and recycling. For example, waste lubricating oils can be re-refined and used again, and some waste acids can be used in sewage treatment plants to regulate alkalinity. Lead is routinely recovered from waste car batteries, and silver is recovered from the wastes of photographic labs.

Can the Public Influence Decisions?

Waste Disposal Site

Etobicoke
Registry # IA7E1900

description In November 1997, a waste disposal/recycling operation in Etobicoke, Recycle Plus, applied for a certificate of approval for a facility that would process glass, paper, metal, plastic, and organic waste. The company wanted to receive up to 765 tonnes of solid waste every day and to store up to 468 tonnes. Without waiting for approval from the Ministry of the Environment, Recycle Plus began operations. In February 1998, MOE issued a field order for the company to remove all waste from the property and not receive any more until an approval was issued. When Recycle Plus then discovered that waste recycling facilities were not permitted on its site according to City of Toronto's zoning by-laws, the company submitted an application to the city to amend the by-law.

public comments Neighbouring industries, including food processors, retail and wholesale sales, warehousing and manufacturing facilities, were strongly opposed to the facility. They were concerned about noise, odours, litter, vermin, dust and heavy truck traffic, and in particular, about the organic waste being accepted at the site. The site was not large enough to accommodate the proposed volumes of waste, commenters argued.

decision In response to concerns raised by both MOE and the public, Recycle Plus revised its application for approval. All processing, transfer and storage of waste would now take place indoors, and the amount of organic waste and the total amount of waste would be reduced by half. MOE issued its approval to the company in response to the revised application, and included a condition that the company not operate the facility until permitted under municipal zoning. This decision was appealed. (See page 203 in the Other Legal Rights section).

EBR emphasis is on pollution prevention

A strong emphasis on pollution prevention has been incorporated into the *Environmental Bill of Rights* by making one of its explicit purposes "the prevention, reduction and elimination of the use, generation and release of pollutants that are an unreasonable threat to the integrity of the environment."

In its Statement of Environmental Values, the Ministry of the Environment has committed to integrating the purposes of the *EBR* (including pollution prevention) into its decision-making. The ministry's SEV also states that "the ministry's environmental protection strategy will place priority first on preventing and second on minimizing the creation of pollutants that can damage the environment."

The ECO reviewed how MOE responded to this application on hazardous waste management, and how the ministry considered its commitment to pollution prevention.

How is hazardous waste regulated in Ontario?

The regulation of hazardous waste is quite complex, reflecting both the fact that there are so many kinds of materials and that they present significant risks to the environment and human health. Regulators can take two conceptual approaches: They can focus on pollution control, which tries to minimize environmental damage once pollutants have been produced. Or they can focus on pollution prevention. Pollution prevention can be achieved by substituting different raw materials, or by redesigning processes or final products. In Ontario, however, most of the regulations for hazardous waste are based on pollution control.

There are 14 different regulations pertaining to waste management in Ontario, but the most important regulation for hazardous waste is Regulation 347 under the *Environmental Protection Act*. Regulation 347 focuses on pollution control, and took its current shape in 1985, when the approach of tracking the movement of hazardous waste was introduced. The Ministry of the Environment wanted to be able to track these wastes in order to control illegal dumping, and thus introduced the requirement for multi-copy "Manifest Forms" to accompany each load of waste. Both generators and receivers of waste have to submit copies of these forms to the ministry, and keep copies of them for two years. The ministry also introduced an enforcement regime to go along with the tracking system, which identifies violators by a computerized flagging system.

Regulation 347 contains many technical definitions for terms like "ignitable waste," "liquid industrial waste" and "severely toxic waste," and sets out requirements for handling, storing, managing and disposing of them. Regulation 347 also contains certain exemptions for things like small quantities or empty containers.

Proposed changes to Regulation 347

In 1996, MOE released a consultation paper called "Responsive Environmental Protection," which proposed to overhaul the way waste management is regulated in Ontario. The ministry's consultation paper indicated

that the existing rules were too complicated, required too much paperwork and were outdated. MOE indicated that it wanted to encourage waste diversion and recycling, but did not include pollution prevention as a key goal of the reforms, despite the ministry's SEV commitment to make pollution prevention its first priority. MOE proposed a large number of changes affecting hazardous waste, including the following:

- To promote clarity and consistency, MOE proposed to consolidate eight waste management regulations into one regulation. MOE said it had found that confusion on the part of waste generators and handlers had been a major contributor to non-compliance with ministry requirements.
- MOE also proposed harmonizing its definition of hazardous waste with that of the federal government to simplify paperwork and to reduce the number of wastes it tracked. MOE said it needed to rectify the current situation, in which over 350,000 copies of manifests were being submitted to the ministry each year.
- To encourage recycling, MOE proposed establishing some clear rules for product manufacturers who want to collect and recycle spent products like old batteries or old paints ("manufacturer-controlled networks").
- To reduce paperwork, MOE also proposed a simplified system for tracking small quantities of hazardous waste (less than 100 kg/month), allowing waste haulers to retain forms and submit summaries to the ministry on a quarterly or semi-annual basis.
- MOE proposed to clarify the definition of "agricultural waste" to exclude liquid industrial and hazardous waste. This would strengthen the rules, since Regulation 347 currently exempts all agricultural wastes from tracking and reporting requirements.

After reviewing public comments, MOE confirmed in November 1997 that it planned to go forward with these proposals. In June 1998, the ministry posted a proposal on the Environmental Registry for a regulation containing most of the above changes, as well as many other changes to waste management rules. MOE provided a 100-day comment period, in consideration of the scope and complexity of the regulation.

By the end of 1998, MOE had still not made any final decisions on this regulation. The ministry received approximately 130 public comments on the proposed regulation, most of them addressing hazardous waste issues. MOE is still reviewing these comments and developing a strategy to prioritize the components.

Regulating hazardous waste flows to lakes, rivers and sewers

Large quantities of hazardous materials are discharged into sewers and sewage treatment plants, eventually reaching lakes and rivers. In 1991, the Ontario Waste Management Corporation (OWMC) estimated 383,000 tonnes of hazardous wastes were released annually into Ontario's municipal sewer systems. The OWMC also estimated that approximately an equal quantity of "subject" and hazardous waste flows annually into industry-owned waste water treatment plants. The effluents of both municipal and industrial waste water treatment plants are discharged to lakes and rivers.

Starting in 1993, MOE began to phase in regulations controlling the direct discharge of toxic substances from industries to lakes and rivers. The regulations were established under the Municipal Industrial Strategy for Abatement (MISA), which was first announced in 1986 with the goal of "virtual elimination of persistent toxic substances." The MISA regulations focus on pollution control. They cover nine industrial sectors and approximately 250 industrial plants, and have been phased in gradually sector by sector. For example, the Petroleum and Pulp and Paper sectors had to comply with regulated effluent limits by January 1996, while the effluent limits for the Electric Power Generators and the Iron and Steel sectors came into effect in April 1998.

MOE also originally proposed pretreatment requirements for industries discharging wastes to municipal sewers, as well as tougher rules for the discharges from municipal sewage treatment plants to waterways. This was intended to be the "M" of the MISA program. The United States has a national Pretreatment Program which requires approximately 1,600 publicly owned sewage treatment plants (receiving about 80 per cent of national waste-waters) to enforce federal standards for discharges to sewer systems. But in Ontario there has been no progress on this front, even though MOE has estimated that our municipal sewage treatment plants release 18 tonnes of organic compounds and 1,100 tonnes of heavy metals into Ontario waterways annually.

Municipalities are free to adopt a "model sewer-use by-law" developed by MOE, and a number of larger municipalities have taken this approach. The model by-law includes limits for discharges of many hazardous wastes into sewer systems, but the limits can be exceeded if municipalities sign agreements with specific sewer users. Under the agreements, the sewer users typically pay a surcharge when they exceed the limits.

MOE's response to the application on hazardous waste

MOE denied the application for review of hazardous waste management policies. For some of the issues raised by the applicants, MOE provided a reasonable rationale for not carrying out a review. But for many other issues, MOE's rationale was weak, failing to address evidence and concerns raised by the applicants. For example, MOE did not respond to applicant concerns about gaps in a database of waste generators, poor data on hazardous and liquid industrial wastes at recycling facilities, or inadequate information on discharges of hazardous wastes to sewers.

The applicants had requested a Pollution Prevention Planning Act, but MOE's response to the application said this was not needed because voluntary actions were showing success in the province. Case studies of voluntary pollution prevention activities, according to the ministry, show reductions of toxic substances and hazardous wastes totalling 191,000 tonnes per year since 1992. But MOE did not indicate how these reductions compare to the total annual production of hazardous wastes in Ontario.

MOE failed to provide any detailed responses to 24 issues in the application, stating merely that they were "under review, under regulation reform or other initiatives." These responses by the ministry were inadequate and misleading. ECO discovered that all 24 issues were indeed under review, but that MOE's proposed policy direction would in several cases make the rules less strict — the opposite of what the applicants were requesting. For example, the applicants had requested stricter regulation of pesticide container collection depots, including improved

staff training. By contrast, MOE's proposed regulatory changes would set out fewer detailed requirements for staff training.

In other cases where MOE assured the applicants that the issue was "under review," the ECO discovered that in fact MOE was proposing to maintain that part of the regulation that the applicants wanted changed. For example, the applicants had requested a regulation controlling emissions from hospital incinerators. But MOE's proposed regulatory changes to Regulation 347 did not change the existing exemption for hospital incinerators.

Even when MOE's intention was to tighten an environmental regulation, the ministry failed to explain this in its response to the applicants. For example, the applicants had recommended that waste agricultural pesticides become regulated as hazardous waste. MOE's response neglected to explain that the ministry had been planning to take this regulatory approach for at least one and a half years.

MOE's response to the applicants committed to only three follow-up actions. MOE said it would:

- continue to participate in a federal/provincial working group developing a national pesticide database.
- assist the federal government if it wished to carry out a "clean sweep" program collecting waste pesticides.
- have a report on industrial discharges to surface waters available by September 1998, including total amounts of MISA substances by industrial sector, totals by receiving water body, and leading facilities in each sector. But the ECO has learned that as of January 1999, no such report is available or in development. A report on 1996 discharges has been published, but it does not contain the kind of information promised.

Can the Public Influence Decisions?

Environmental Management Agreement

Ministry of the Environment, Environment Canada and Dofasco
Registry # PA7E0009

description Under this voluntary agreement, Dofasco said it would reduce air and water emissions and solid waste production at its Hamilton facilities, as well as destroy 50 per cent of stored PCBs by the end of 2000. For its part, the Ministry of the Environment would make a reasonable effort to exempt Dofasco from the provincial regulation that requires that manifests be filed for waste generated and transported within the Dofasco complex for treatment.

public comments Some commenters opposed the Dofasco agreement, saying there was no public input and no penalties for missed targets. Commenters also said that destroying only 50 per cent of stored PCBs was too low a target.

decision The ministry entered into the agreement, but removed Dofasco's exemption from the requirement to file waste manifests. Dofasco also agreed to eliminate all of its stored PCB waste by 2000 rather than reducing it by 50 per cent. However, in its final agreement with Dofasco, the ministry pointed out that if its proposed changes to the General Waste Management Regulation under the *EPA* are approved, Dofasco, as well as other companies, would be exempted from having to file manifests.

ECO Commentary

Two themes recur in this review of hazardous waste management issues: the lack of focus on pollution prevention, and the need for improved databases and public information. Both themes have direct connections to the *Environmental Bill of Rights*.

In spite of MOE's stated commitments to pollution prevention, the ECO has found that MOE's policy and regulatory focus for hazardous waste management has primarily been one of pollution control. The proposed overhaul of Regulation 347 maintains this focus. Although some of the changes in the regulation are intended to stimulate diversion and recycling of hazardous waste, the overall package places little or no emphasis on pollution prevention.

Certainly, there will always be a need for pollution control rules such as those in Regulation 347, since it would not be realistic to imagine a future Ontario in which no hazardous wastes are created. But it would be more realistic — and more cost-effective in the long run — to focus on pollution prevention. Curbing the rate at which hazardous wastes are created will mean lower waste management costs for businesses, lower enforcement costs for governments, lower cleanup costs for taxpayers, and a healthier environment.

MOE has clearly accepted this principle, judging by the ministry's commitments to pollution prevention in its SEV and elsewhere. The ministry also has a program that encourages companies to take on voluntary pollution prevention activities. (See ECO's 1997 Annual Report, p. 53.) MOE's 1998-99 Business Plan reports that due to this program, over 10,000 fewer tonnes of toxic substances and wastes were generated last year. MOE has set a long-term goal for this voluntary program to reduce 200,000 tonnes of toxic substances and wastes by the year 2010.

What is missing, though, is a more comprehensive strategy to curb the generation of hazardous waste in Ontario. Such a strategy would need to be supported by a reliable inventory of the composition and size of various hazardous waste streams. Without reliable data that define the scope of the problem, it is hard to set priorities or realistic targets, and impossible to monitor progress.

Need for improved databases and public information

MOE's Statement of Environmental Values says that the ministry will continue to monitor and assess changes in the environment. In 1997, MOE released a draft version of a Status Report on Ontario's Air, Water and Waste, based on 1992 data. This report contained an overview of hazardous waste in Ontario, explaining that over two million tonnes of hazardous and liquid wastes are generated in the province each year, and that the output of this waste grew by about 10 per cent per year from 1987 to 1990. The report also suggested that the future growth rate of hazardous waste would probably be more modest and would follow economic cycles.

But MOE decided in 1997 not to continue with State of the Environment reporting such as this status report, and the ministry does not produce periodic overviews of hazardous waste generation rates for the province.

The quality of the ministry's monitoring of hazardous waste has been criticized by a number of observers:

* The Provincial Auditor's 1998 Annual Report criticized MOE's failure to follow up adequately on a 1996 survey of approximately 11,000 hazardous waste generators. About 3,000 generators responded, and MOE has not yet explained the lack of reporting of hazardous waste disposal from the other 8,000 generators.
* In the 1997 annual report, the ECO reviewed how MOE was monitoring and reporting on MISA data, finding that limited public information was available, and that the ministry was carrying out little trend analysis, even for internal purposes. MOE was not calculating total loadings of industrial pollutants into waterways, nor was the ministry monitoring year-to-year trends in the percentage of facilities in compliance. MOE was also not monitoring persistent toxics in effluents of sewage treatment plants. The ECO has learned that MOE is still not doing this analysis of MISA data.
* The 1998 CIELAP report on Hazardous Waste Management in Ontario raised concerns about gaps in the Ontario Waste Generator Database. It recommended the establishment of a public registry of waste sites operating under exemptions from Regulation 347. It also raised concerns about the lack of data on pesticide sales and use, and recommended that commercial pesticide vendors and applicators should be required to file annual reports. The report also noted that few figures are available regarding the generation of household hazardous waste, and that the available estimates range widely — between 20,000 to 86,000 tonnes/year.

Some more specific hazardous waste issues raised by this *EBR* application are discussed elsewhere in this report. For example, page 12 contains a description of the role of the Ministry of Health in upgrading Ontario hospital incinerators, most of which operate without pollution controls. For a discussion of how dust suppressants are regulated, see page 179. The ECO plans to continue reviewing specific hazardous waste issues in future years.

Conclusions

The ECO will continue to monitor MOE decisions on hazardous waste management, including decisions on amendments to Regulation 347, and will also continue to review how the ministry applies its stated commitments regarding pollution prevention and environmental monitoring to this important issue.

Hazardous Waste Concerns raised by Application R98002

Use of pulp mill wastes as dust suppressants	see p. 179 of this report (pulp mill wastes)
Emission standards for biomedical waste incinerators	see p. 12 of this report (MOH SEV)
Rules for waste oil recycling and collection depots	ECO will review in 1999
Household hazardous waste	ECO will review in 1999
Lead Acid Battery Recycling	ECO will review in 1999
Model Sewer Use Bylaw	ECO will review in 1999
Rules for waste oil disposal into water, sewer and landfills	ECO will review in 1999

Waste-oil burning in small furnaces	ECO will review in 1999
Rules for land disposal of hazardous wastes	ECO will review in 1999
Emission standards for waste incinerators	ECO will review in 1999
Reporting by commercial pesticide applicators	ECO will review in 1999
Rules for disposal of agricultural pesticides	ECO will review in 1999
Rules for pesticide container depots	ECO will review in 1999
Reporting by waste generators	ECO will review in 1999
Fees for public access to data on waste generators and waste tracking	ECO will review in 1999
Pretreatment standards for landfill leachate disposal	ECO will review in 1999

Recommendation 34

To implement its stated commitments to pollution prevention and to complement existing pollution control legislation, MOE should develop a strategy with measurable targets to curb the generation of hazardous waste in Ontario. The strategy's development should be based on:

- **the best available information on hazardous waste quantities, composition and trends**
- **an evaluation of the environmental costs and benefits of various policy and regulatory options**
- **informed public consultation.**

Recommendation 35

MOE should periodically publish reports on hazardous waste generation rates for Ontario, including information on year-to-year and regional trends in waste stream quantities and composition.

Further Reading on Hazardous Waste Issues

Publications

Better, Stronger, Clearer; Environmental Regulations for Ontario, Ministry of the Environment (November 1997)

Draft 1992 Status Report on Ontario's Air, Water and Waste, Ministry of Environment and Energy (January 1997)

Hazardous Waste Management in Ontario, Canadian Institute for Environmental Law and Policy (1998)

MISA Municipal Program, Ministry of Environment and Energy (January 1994)

Responsive Environmental Protection, Ministry of Environment and Energy (July 1996)

Recycling Pulp and Paper Mill Wastes

The ECO regularly hears from members of the public who are concerned about the harmful effects of recycled pulp and paper mill wastes. In most cases, "recycling" of these wastes entails some form of release into soils, water or air. Better scientific studies are needed to ensure that public health and the environment are adequately protected from the contaminants contained in recycled pulp and paper mill wastes. The rules governing the recycling of pulp and paper mill wastes need to be clarified.

Background

Ontario's pulp and paper industry produces large quantities of sludge wastes, in both pulp-making and paper-making operations. The generation rates vary widely among mills. For example, the production of recycled paper produces large quantities of sludge, amounting to about 20 per cent of the used paper fed into the de-inking mill. The composition of the sludges also varies depending on the industrial process, but they usually contain short fibres of pulp or paper, clay particles, and residues of the chemicals used in the process. Sludges from de-inking mills also contain inks that were removed from the recycled paper.

The industry also produces large volumes of a liquid waste, called black liquor, which is a mixture of cooking liquor effluent from the pulping reactor, dissolved lignin, and washed pulp.

Ontario's pulp and paper industry is increasingly trying to recycle both its sludges and black liquor. Recycling of industrial wastes has been encouraged for many years by both regulators and environmental groups: finding good uses for manufacturing wastes can relieve pressure on landfill sites and sewage treatment plants. It also helps companies to reduce waste disposal costs. However, not everyone agrees on the definition of "good uses." There is often controversy about the environmental impacts of these materials in their new incarnations.

To encourage the recycling of paper and to conserve capacity in the province's landfill sites, the Ministry of the Environment has, for a number of years, approved the spreading of sludges from a paper recycling mill onto farm fields near Peterborough. MOE has also recently approved a controversial operation in northern Ontario which will mix mill sludges with scrubber ash from the mill's smokestack, producing a material to be sold as a soil conditioner. As well, MOE has been permitting the spreading of black liquor onto rural roads to control dust.

What are the environmental concerns?

Since 1995, many groups and individuals have contacted the ECO with concerns about the recycling of pulp and paper mill wastes. Ontarians have submitted applications under the *EBR* and have also requested leave to appeal the instruments that MOE has issued to permit the recycling of these wastes. The applicants cite concerns about contamination of soil, groundwater and surface water, as well as impacts on livestock, wildlife and soil microorganisms. Many have also complained about odours, and symptoms such as headaches, burning eyes and breathing difficulties associated with freshly spread sludges.

According to the pulp and paper industry, sludges contain organic matter, plant nutrients and kaolin clay. But residents near recycling sites worry about toxic materials such as dioxins, furans and heavy metals such as mercury. Although industry says the sludges contain low amounts of these toxics, in the U.S., a survey of more than a hundred mills in 1988 found dioxins and furans in bleached pulp mill sludges, resulting in calls to regulate both landfill disposal and land application of such sludges. More recently, the U.S. Environmental Protection Agency (USEPA) has been assessing the risks of land application of paper mill wastewater treatment sludges, and considering whether these sludges should be listed as hazardous wastes. In Ontario, the Ministry of the Environment, on the other hand, does not appear to have carried out any independent studies of the composition of these sludge wastes.

According to the USEPA, black liquor also has environmental impacts. Spills of black liquor can have impacts on receiving waters, are a source of air emissions, and can disrupt the microbial action of wastewater treatment plants.

How are these activities regulated?

MOE's regulation of wastes from pulp and paper mills is complex and variable, in spite of common underlying environmental issues. Below are three examples of how these materials are regulated.

The rules for spreading sludges onto farm fields

MOE regulates the spreading of all types of sludges onto farm fields through the "Guidelines for the Utilization of Biosolids and Other Wastes on Agricultural Land" (the "Biosolids Guidelines"). First issued in 1992, the Biosolids Guidelines are very vague on some key points. For example, they don't mention pulp and paper mill sludges, and distinguish only between sewage biosolids and "other wastes." The Guidelines state that "little is known about the effects of industrial organic contaminants contained in other wastes when applied to agricultural lands. The concentrations of each industrial organic contaminant will be assessed on a case-by-case basis." The Biosolids Guidelines also say "that metal additions to soil from waste materials is undesirable, and that application rates of metals should be reduced in the future," but they don't say when this long-term target might be in effect.

The Biosolids Guidelines were consolidated and posted on the Registry as a new decision by MOE in 1996, but they were not clarified or strengthened. MOE also failed to address public comments that pointed to stronger regulations in other jurisdictions.

CASE STUDY: PAPER MILL SLUDGE SPREADING

Since 1991, when MOE issued a "Provisional Certificate of Approval for a soil conditioning site" to Atlantic Packaging Products, Ltd., the company has been spreading sludges from its paper recycling operations onto farm fields near Peterborough. Although this certificate of approval is called "provisional," it permits very large-scale sludge spreading — 120,000 tonnes were applied to local fields in 1997 alone. Residents living near the farms contacted the ECO and sought to use the *EBR*. But since this type of instrument is not prescribed under the *EBR*, local residents cannot comment on these approvals before they are granted by the ministry and thus they were not successful in their request for an *EBR* review. When the residents asked MOE for a list of all complaints about the sludge spreading, the ministry did acknowledge there had been about 250 complaints, but did not release the list.

As incentives for farmers to participate in the Peterborough sludge spreading program, the company provided a free sludge-spreading service and gave farmers free nitrogen fertilizer — 90 pounds per acre. Paper sludge contains almost no nitrogen, and soil microbes cannot decompose the sludge unless nitrogen is added. Farmers were allowed to apply the nitrogen to other fields if they wished. Thus, depending on their acreage, participating farmers could save up to $13,000 a year in fertilizer costs.

MOE's Biosolids Guidelines do state clearly that "materials must be of benefit to crop production or soil health and not degrade the natural environment before approval for use will be given by MOE." However, MOE has permitted sludge spreading to continue since 1991 in the Peterborough area without any demonstration of benefits to the soil. The paper mill evaluated paper sludge applications on the fields of approximately 200 farms over more than seven years, and finally submitted a required report in the fall of 1998 which concluded: " . . . there was no reproducible trend in crop yield data and soil nutrient retention and no definitive changes in other soil characteristics." Because MOE was concerned about the scientific validity of the study done by the paper mill, MOE scientists also carried out a short study in the summer of 1998. The MOE study grew three crops in pots containing soil, or soil plus sludge, or soil plus sludge plus nitrogen fertilizer. The MOE study found that while soybeans grew well when sludge was added, wheat and tomatoes did not grow well in sludge, even when nitrogen fertilizer was added.

MOE now has to decide whether the sludge is of benefit to crop production or soil health, and whether it should allow the sludge spreading to continue on agricultural lands.

The rules for sludge composting

MOE is in the process of updating its "Guidelines for Aerobic Composting Facilities and Compost Use," and released a draft in May 1998. These new draft Guidelines specifically reference pulp and paper sludges, while the previous Interim Guidelines, in effect since 1991, don't mention pulp and paper sludges. However, the Interim Guidelines did specify that compost must heat up to a minimum temperature to be in compliance. They also state that "simple exposure of solid organic matter under non-engineered conditions resulting in uncontrolled decay is not considered to be composting and will not be permitted."

CASE STUDY: SLUDGE COMPOSTING

In 1997, a company in Sault Ste. Marie proposed to mix 167 tons a day of pulp mill sludge with scrubber ash and process it into a soil conditioner. Local residents raised concerns that an earlier pilot project by the same company, using the same material, had caused serious odour problems, and pointed out that MOE had finally ordered the proponent to transport the sludge mix to a certified waste disposal site. But in late July 1998, MOE approved the full scale project, asserting there would be compliance with the old interim composting guidelines, which state that compost must heat up to a minimum temperature to be in compliance.

The ECO review has identified several problems with MOE's approval of this particular project. Most important, MOE acknowledged in a 1998 letter that the pulp sludge in this case is not compost as defined by its own guidelines, presumably because the material fails to heat up. The notice of MOE's decision on the Registry to approve the project inaccurately stated that no public comments had been received, when in fact MOE had received numerous letters of concern about this proposal and had participated in meetings with local residents. Public concern about the approval was so strong that four separate applicants sought leave to appeal it. (See the discussion on p. 202.)

The rules for using dust suppressants

In 1997, the ECO reported on the regulation of road dust suppressants: MOE will sign a Letter of Agreement with a producer of dust suppressants if the ministry is satisfied that the material is a "product" rather than a waste. However, MOE relies on information provided by the producer, without conducting independent tests on dust suppressants or setting regulated limits for contaminant levels.

In June 1998, MOE proposed a new waste management regulation, including a standardized approval regulation (SAR) instead of Letters of Agreement to regulate dust suppressants. Under this regime, dust suppression systems would have to conform to standardized rules on start-up, operations, ongoing requirements, record keeping and reporting. The contents of dust suppressants would also have to conform to standardized contaminant limits for certain substances. However, as with other proposed SARs, the public would not have

a chance to review and comment on dust suppressant proposals under the *EBR*. Instead, seven days before any application, only the clerk of the local municipality would receive notice.

MOE has received a large number of negative comments on this proposal for dust suppressants. To qualify, municipalities would have to designate their rural roads as waste disposal sites, and they are opposed to doing this. Based on its own investigations, Environment Canada has commented that MOE's proposed 50-metre "no application" distance from receiving waters may not be enough, since some dust suppressants can be washed over longer distances, and municipalities say they cannot realistically identify and avoid all wells along rural roads. Environment Canada also recommends adding ditches and stormwater collection systems to the list of waterways that need protection from dust suppressants.

MOE now plans to reconsider its approach to dust suppressants.

CASE STUDY: USING BLACK LIQUOR AS A DUST SUPPRESSANT

In December 1993, MOE signed a five-year Letter of Agreement with Domtar's pulp mill in Trenton, permitting the use of its black liquor as a dust suppressant on rural roads. The Letter of Agreement assumed that Domtar would soon undertake a major plant expansion, including a new recovery boiler that would use the black liquor as fuel. Although the plant expansion did not occur, the plant increased its production of black liquor by 45 per cent and now produces 62 million litres of this waste material each year. Domtar called the material "Dombind" and offered it free to about 70 rural municipalities in the region.

Dombind is water-soluble, and, according to MOE's application guidelines, should not be applied within 50 metres of a waterway to prevent toxicity to aquatic life. The ministry received complaints that the spreading trucks were not staying far enough away from rivers and creeks. There have also been numerous complaints over the past five years about the smell, look and stickiness of the material. A number of townships stopped using Dombind, citing environmental concerns. The World Wildlife Fund launched a campaign against the spreading of Dombind on roads, and urged MOE not to renew its Letter of Agreement with the company.

Then in December 1998, three former Ontario Ministers of the Environment jointly signed a letter urging the current Minister of the Environment to end the practice of spreading this material on roads. Shortly afterward, MOE announced that it intends to phase out the practice over the next two years, because the company was producing increasing amounts of the material and because of potential for long-term environmental impairment. The company now says that because of the added cost of managing this waste, the decision not to allow the spreading of its black liquor on rural roads is threatening the future of its Trenton mill, involving as many as 140 local direct jobs and 300 secondary jobs.

Conclusions

As illustrated by the case studies on these pages, there is a strong and growing interest in the recycling of industrial wastes. But there is also significant concern from people living near sites where waste is created and where it is being applied to land or roads. There are public concerns that the patchwork of existing and proposed regulations and guidelines is not consistent and that it does not adequately deal with the environmental issues. The resulting local controversies have been time-consuming and frustrating for ministry staff, industry and members of the public. To resolve this controversy, the regulatory framework needs to be improved.

Recommendation 36

MOE should undertake a broad policy review of the overall environmental costs and benefits of recycling and reuse of various types of industrial wastes, including composting and applications to land. The review should:

- **evaluate industrial recycling trends, case studies and technological advances**
- **consider the best available scientific information on long-term environmental impacts to downstream receiving media**
- **propose and evaluate policy and regulatory options to minimize the environmental impacts of industrial waste recycling**
- **share information with the public and involve the public in policy development.**

Forest Harvesting Practices

Results of an MNR Investigation

An environmental group checked whether forestry companies had followed Ministry of Natural Resources rules for harvesting forests on public land. Based on their findings, they submitted applications for investigation under the *EBR*. MNR's subsequent investigation led to enforcement action against the companies. This investigation also highlighted some problems with the laws protecting Ontario's forests. It revealed several further contraventions of the *Public Lands Act* and the *Crown Forest Sustainability Act* that could not be enforced because the limitation periods had expired, a particularly serious matter in view of MNR's much reduced staffing and its reliance on industry self-monitoring. Also, the highly skilled MNR staff found it difficult to apply the ministry's new approach to compliance, which raised questions about MNR's capacity to protect the province's natural resources effectively.

Who asked for an investigation

In the summer of 1997, an environmental group did field surveys of recently logged sections of the Algoma Highlands, a scenic forest landscape northeast of Sault Ste. Marie. The group wanted to check whether forestry companies had followed Ministry of Natural Resources rules for harvesting forests on public land. To guide their field survey, they relied on the site-specific forest management plans and annual work schedules approved by MNR, and they checked how well regulations, codes, and guidelines had actually been followed. They published their findings in April 1998.

Together with another environmental group they also submitted three applications for investigation under the *EBR*. They included photographs and video evidence of trees cut to the edge of streams, forest stands removed from "no disturbance" zones, debris piled on top of streams, and heavy machinery damage to watercourses. The *EBR* applications alleged numerous contraventions of the *Crown Forest Sustainability Act*, the *Public Lands Act*, the federal *Fisheries Act*, the *Environmental Protection Act*, and the *Ontario Water Resources Act*. The ECO forwarded these applications to both MNR and the Ministry of the Environment.

Who carried out the investigations

MNR decided to carry out an investigation of the forestry issues and promptly established a five-member investigation team composed of staff from outside the Sault Ste. Marie administrative district. The team leader was a project manager for forest compliance, and other members of the team had expertise in fisheries and wildlife, the forest industry, and wood tenure and measurement. Field inspections were carried out by the team within a month of receiving the application. MNR's investigation was careful and thorough, and very detailed investigation findings and recommendations were published by the end of November 1998.

MOE turned down the request for investigation, explaining that evidence regarding water pollution could not be collected a year after the event.

What MNR found

MNR's investigation team confirmed most of the observations of the applicants, confirmed 10 specific contraventions out of 40 alleged contraventions, and recommended enforcement action in three instances, including one recommendation for "immediate" enforcement. The team also found another stream damage site not identified by the applicants. In several other instances, the MNR team was not able to recommend enforcement because the limitation periods for the relevant laws had already expired. In several further instances, the team observed environmental damage, but found the applicable rules too confusing to recommend enforcement. The team also found that in some cases MNR staff had not documented approvals for forest operators to cross streams with heavy machinery.

Staff of the Ministry of Natural Resources carried out high quality work on this set of investigations. The MNR investigation team carefully checked all allegations and responded to them in a detailed report. The team followed up with thoughtful and practical recommendations, including enforcement actions and policy changes to prevent future problems. Specifically, the MNR team recommended:

- clearer, stronger guidelines to protect small streams
- training for MNR staff and industry on the rules covering road access and water crossings
- that MNR staff document whenever approvals are given to cross streams with heavy machinery
- that flagging tape or paint be used to mark areas designated as "no disturbance" to prevent cutting errors.

MNR's actions included the immediate issuance of a Repair Order under section 56(1) of the *Crown Forest Sustainability Act*. MNR initiated an amendment to the Forest Management Plan to withdraw from future allocation an area of similar value as contained in the trespass. MNR also indicated it would issue additional Repair Orders if voluntary compliance by the company was not forthcoming.

ECO Commentary

These *EBR* investigations raise concerns about the adequacy of existing forestry inspection and compliance procedures. Some of the alleged infractions happened as far back as the summers of 1993, 1994 and 1995, but had not been previously reported. The MNR investigation report did not explain what the normal inspection and compliance procedures have been for these forest areas, or make any reference to other inspections or audits, either past or future.

MNR has told me it does not believe that the forest compliance program was the subject of these investigations, and therefore was not described in the report. The ministry says that its compliance program is an open process, with descriptions on public record through a number of documents such as the Forest Compliance Handbook, Forest Compliance Strategy, Understanding Compliance in Forest Operations, and Guideline For Forest Industry Compliance Planning. The ECO will continue to review this issue, to clarify how and when these particular forest operations would have been inspected by MNR staff under routine circumstances.

This is not the first time that the ECO has raised concerns about forestry monitoring and compliance. The 1996 ECO annual report recommended that MNR provide adequate resources to enforce its regulations, and regularly report on enforcement activities and the effectiveness of self-monitoring by the forest industry.

These investigations also highlight the inadequacy of the current limitation periods for enforcing violations of Ontario forestry laws. The MNR investigation team found that the *Public Lands Act* had been contravened at two sites, but they could not enforce the Act because the six-month limitation period had expired.

Can the Public Influence Decisions?

Healing Lodge

Lake Nipigon
Registry # PB8E1007

description When the Whitesands First Nation asked the Ministry of Natural Resources for permission to build a healing lodge on the north shore of Lake Nipigon, the ministry posted a proposal on the Environmental Registry to amend the Lake Nipigon Integrated Management Plan and the Nipigon District Land Use Guidelines, which do not permit these kinds of land uses.

public comments Most of the people who commented on the proposal were worried about the new road to the healing lodge, which would have to be built through the Windigo Bay Park Nature Reserve. Just at the time the proposal for the healing lodge was posted on the Environmental Registry, the Ministry of the Environment was receiving several requests from people concerned about the impact of the road on the local caribou herd. MNR planned the road under its Class EA for Small Scale Projects, but people wanted to have the road "bumped up" so it would have to undergo a full environmental assessment (EA). One person commenting on the Registry posting asked MNR to wait until MOE made a decision about the full EA on the road before approving the amendment to permit the healing lodge.

decision MNR decided to withhold approval for the healing lodge, as commenters asked, while MOE was still considering the requests for a full environmental assessment for the road. MNR also met with the Whitesand First Nation to make modifications to the plans for the road, including the condition that roadwork not take place during caribou migration periods. In August, MOE denied the requests for a full EA, saying that the road would be available only to members of the Whitesand First Nation, and would be signed and gated to prohibit public access. Shortly thereafter, MNR approved the amendments to the Lake Nipigon Integrated Management Plan and the Nipigon District Land Use Guideline to allow the native healing lodge.

Similarly, at three sites, MNR was not able to set penalties or charges under the *Crown Forest Sustainability Act* because the two-year limitation period had expired. Given MNR's much reduced staffing and the reliance on industry self-monitoring, it is unlikely that the vast majority of forestry operations can be inspected by MNR within six months of logging. MNR does receive annual reports from forestry companies describing forestry operations, but it is not clear whether MNR staff review these reports, do groundchecks, or summarize them for compliance purposes. Given a six-month limitation period, MNR would be unable to undertake any enforcement actions related to the *Public Lands Act* if it were to discover compliance problems after reviewing annual reports prepared by forest companies.

Although the MNR investigation team found that stream sides had been disturbed at two sites by tree harvesting, debris piles and heavy machinery, the team did not recommend enforcement because they found the application of MNR technical and environmental guidelines to be ambiguous and confusing. This was especially true with regard to small streams, which provide important nursery habitat for fish and whose water quality and temperature affect downstream areas. This again raises the larger questions of why the confusing aspects of these guidelines had not been noticed earlier, and, in turn, whether MNR staff get much opportunity to test the guidelines in actual enforcement situations. The MNR investigation team recommended very firmly that all relevant forestry guidelines should be clarified and strengthened to maintain the ecological function of small streams and wet areas.

This investigation also demonstrates the challenges faced by MNR compliance staff when they try to apply the ministry's new approach to compliance to real situations. Under this approach, penalties can vary depending on the degree of environmental damage and the past record of the forest operator. MNR compliance staff must not only verify that a rule was broken (e.g., trees were cut to the stream edge), but must also evaluate what the environmental damage was in each instance — for example, did the water temperature increase, was erosion significant, etc.? This approach assumes that inspection staff have extensive experience and expertise with very local forest conditions and with recent forestry practices of the particular licensee — assumptions that may be hard to meet, given MNR's reduced resources. Even the highly skilled investigation team in this particular instance found it difficult to evaluate the degree of environmental damage, since they couldn't compare "before" and "after" situations. This variable compliance approach may also mislead forest operators, by implying that environmental rules can be broken without penalties in some cases.

Recommendation 37

MNR should promptly implement the recommendations of its own staff team which investigated the Algoma Highlands application into forest harvesting practices.

Recommendation 38

MNR should provide adequate resources to enforce its regulations and regularly report on enforcement activities.

Recommendation 39

MNR should assess and report on the effectiveness of the self-monitoring system with respect to forest management in achieving environmental protection and make this information public annually.

Recommendation 40

MNR should enact limitation periods for contraventions of Ontario forestry laws that reflect the frequency of inspections and audits by MNR staff.

Recommendation 41

MNR should make its forest compliance policy stronger by including more objective measures for determining whether penalties should apply.

Instruments

An application by the Nova Group to take water from Lake Superior and export it to Asia as drinking water illustrates how important the public's right to notice of individual instruments is for protecting the environment of Ontario.

What are Instruments?

Instruments are legal documents issued to individuals and companies that wish to undertake an activity that may adversely affect the environment, such as discharging pollution into the air, taking large quantities of water, or operating a waste disposal site. Instruments include licences, orders, permits and certificates of approval.

Classifying Instruments

Under the *EBR*, certain ministries must classify instruments they issue into one of three classes according to how environmentally significant they are. Class I instruments pose a moderate threat to the environment and are subject to the minimum opportunities for public input. Class II instruments entail a higher level of risk and potential threat to the environment. Class III instruments are the most environmentally significant and require a mandatory public hearing to be held.

A ministry's instrument classification is important for Ontario residents wishing to exercise their rights under the *EBR*. The classification of an instrument determines whether a proposal to grant a licence or approval will be posted on the Environmental Registry. It also determines the level of opportunity for public participation in the decision-making process, whether it is through making comments or applying for appeals, reviews or investigations under the *EBR*.

Ministry of Northern Development and Mines and the Ministry of Consumer and Commercial Relations

I am pleased to report that in 1998 both the Ministry of Northern Development and Mines and the Ministry of Consumer and Commercial Relations have completed their instrument classification processes. This means that members of the public will be able to comment on MCCR instruments proposed under the *Gasoline Handling Act (GHA)*, including variances from the *GHA* or requirements for underground storage tanks. The public will now also have an opportunity to comment on MNDM proposals under the *Mining Act*, such as a lease of surface rights or an order requiring changes to a proposed mine closure plan. In addition, the public can now submit applications for review and investigation in regard to these instruments.

Ministry of Natural Resources

Despite working on this project for at least three years, the Ministry of Natural Resources still has not fulfilled its *EBR* obligation to finalize an instrument classification regulation that would classify environmentally significant instruments under the various Acts it administers. The *EBR* requires the ministry to develop an instrument proposal within a reasonable time after April 1, 1996. The ministry has posted two proposals for an instrument classification regulation, the first issued in March 1997, and the second issued in November 1997, with the latter's comment period ending in January 1998.

The failure of the ministry to finalize this regulation in 1998 means that members of the public are unable to scrutinize the ministry's proposals for specific instruments related to Ontario's natural resources and may not exercise their rights under the *EBR* to comment upon these proposals or apply for a review or investigation, if required. I continue to urge the ministry to finalize and promulgate its classification regulation.

Ministry of Municipal Affairs and Housing

The *EBR* requires the Ministry of Municipal Affairs and Housing to classify environmentally significant instruments the ministry issues under the *Planning Act* within a reasonable time after April 1, 1998. In late 1997 and early 1998, my staff met with staff from MMAH to discuss their instrument classification process. A further meeting was held in late 1998 to review a draft instrument classification regulation. MMAH indicated that the proposed instrument classification will be posted on the Registry for public comment in early 1999.

Can the Public Influence Decisions?

Permit to Take Water

Kitchener
Registry # IA7E1649

description A company applied for a renewal of its permit to take 10 million litres of water per day for industrial purposes from groundwater sources on a property in Kitchener.

public comments In response to the posting on the Environmental Registry, the Region of Waterloo expressed concern about the size of the proposed water taking, noting that it was close to some of the Region's municipal wells.

decision After discussions with the company and the regional municipality, and agreement by each, the Ministry of the Environment issued a permit for 1.6 million litres of water per day.

I am encouraged by MMAH's efforts to implement their *EBR* instrument classification in a timely manner and look forward to reviewing the final regulation after the public comments have been received and taken into consideration.

Recommendation 42

MNR should promulgate its instrument classification regulation.

Recommendation 43

MMAH should ensure that its instrument classification regulation is finalized in a manner consistent with the *EBR*.

INCREASE IN THE USE OF PROGRAM APPROVALS

"Program approvals" allow companies to operate and emit pollutants at levels higher than regulated limits, on the basis that the polluter is undertaking a program that will eventually result in the company's achieving compliance. The original purpose of such an exemption was to allow polluters time to bring their facilities into compliance with the new *Environmental Protection Act (EPA)*, enacted in 1971, without causing severe economic hardship. While a program approval is in place, a polluter may not be prosecuted with respect to company processes described in the approval, and the Ministry of the Environment cannot revoke or amend a program approval before its expiration date except in certain restricted situations. The ministry's ability to issue control or stop orders is also very restricted where a program approval has been issued.

By the early 1990s, MOE had restricted its Directors' authority to issue program approvals to special cases of preventive measures — and not for the abatement of pollution that was already occurring. However, in 1995, MOE removed this restriction from its Compliance Guideline.

MOE indicates that it now considers using program approvals only "when circumstances arise beyond the control of the regulated entity to fully comply with a legal requirement." MOE also notes that it provided training to staff to ensure that program approvals are used in appropriate circumstances, and that it established criteria for the review of program approvals. These criteria were not posted on the Environmental Registry.

During 1998, a survey of postings on the Environmental Registry revealed a marked increase in the use of program approvals. While only two program approvals were posted on the Registry in the previous three years, in 1998 MOE issued nine program approvals.

In 1998, for example, the ECO reviewed concerns by the public about a proposal to issue program approvals to Ontario Hydro. In 1995, in consultation with Ontario Hydro, effluent limits had been established for Hydro's electric power-generating stations under the Municipal Industrial Strategy for

Abatement (MISA) program. These limits covered aluminum, iron, biochemical oxygen demand, phosphorus, zinc and toxicity. In order to give Hydro time to comply, the limits were to come into effect three years later, on April 13, 1998. However, in April 1998, Hydro notified MOE that its Pickering, Darlington and Bruce Generating Stations would be unable to meet all of these effluent limits, and applied for "program approvals" for these facilities.

In May 1998, MOE posted the proposals to issue the program approvals for the generating stations on the Environmental Registry. One commenter recommended that MOE issue remedial or prevention orders under the *EPA* as an alternative. Nevertheless, MOE issued the program approvals to Ontario Hydro as proposed.

Each of the nine program approvals issued by MOE in 1998 has been granted to companies which had failed to comply with pollution limits established by the MISA regulations, despite the fact that the companies had negotiated generous phase-in periods to allow them plenty of time to comply. In using program approvals to relieve industries from their environmental obligations, MOE may be weakening the impact of the MISA regulations, as well as signalling a retreat by the ministry from enforcement of regulatory controls. In their response to me, MOE acknowledged the need to exercise vigilance in the use of these instruments.

Recommendation 44

MOE should severely restrict the use of program approvals.

Can the Public Influence Decisions?

Air Emissions

London
Registry # IA8E0079
Registry # IA8E0009

description Two London companies, both located on the same property near a residential neighbourhood, applied to the Ministry of the Environment for permits to allow air emissions from their facilities, one of which was a manufacturer of surface coatings and the other a solvent recovery operation. Though both companies had been operating illegally without ministry approval, they were asking for ministry certificates of approval for modifications to their facilities. For instance, the companies planned to stop venting solvent vapours from their tanks. By the time MOE reviewed their applications, the companies had already made the modifications.

public comments The ministry received two comments from local residents, one of them a petition signed by 42 people, expressing concern about air emissions from the property, especially solvents.

decision MOE staff contacted one of the people who had commented on the Registry posting, who confirmed that solvent emissions from the facilities had not been a problem during summer 1998, after the modifications had been made. However, in the certificates of approval issued to the companies, the ministry included a condition that procedures be established for recording and responding to complaints about emissions from the property in the future. MOE indicated that the companies have established the required procedures. Since the permits were issued in September 1998, they have received only one complaint, which was properly reported to MOE.

The *EBR* And Enhanced Public Participation

The *EBR* provides important means for the citizens of Ontario to participate in environmental decision-making. Many readers will already be familiar with the Environmental Registry. What is not as well known is that the Registry furnishes only the minimum level of public participation required. With respect to certain instruments, there is a requirement that ministries provide additional notice (such as ads in local newspapers) at the time they post the instrument. The *EBR* also provides added opportunities for the public to participate further in the decision-making process. Referred to as enhanced public participation (EPP), these measures are generally at the discretion of ministry decision-makers.

There is a wide range of EPP measures that can be used, including giving the public the chance to speak directly to ministry decision-makers, or by holding public meetings. In situations where well-defined parties are involved, the government can initiate informal negotiations or more formalized mediation.

Enhanced public participation can result in better decisions, and it can help to avoid future conflict. In my 1994-1995 annual report, I reported on a decision to expand a waste disposal site near Sarnia in which MOE granted a four-month interim approval for the site. Public meetings were held, a community survey conducted, and mediation sessions initiated. This comprehensive public participation program resulted in several agreements on issues such as property value protection, no-fault nuisance compensation, and the future remediation of the site.

It is regrettable there are few such examples to report in 1998. In reviewing the Ministry of the Environment's use of EPP measures, my staff have found they are used sparingly. In one instance, MOE refused to initiate measures despite a specific request to do so by a group of concerned residents who submitted comments on a proposal after it was posted on the Registry. This case resulted in a leave to appeal application being filed. (See the discussion of this case on p. 202.) Although the applicants were ultimately unsuccessful in obtaining leave to appeal, the Environmental Appeal Board member recognized the importance of the issues being raised. It was suggested that MOE carefully monitor the facility to ensure compliance with the terms and conditions being imposed, and that the financial assurance requirements be revisited to ensure they were adequate. These types of issues could have been addressed through negotiations or mediation if either of these processes had been initiated by MOE in a timely way.

I identified two other instrument decisions where members of the public had requested EPP measures, and MOE had refused to provide them. To learn more about MOE practices on EPP, in early October of 1998, I wrote to MOE to inquire about the ministry's use of the EPP provisions in the *EBR* between late 1994 and the end of 1998. Unfortunately, MOE was unable to provide any information. The ECO's own review of MOE's information and procedure manual for the *EBR* indicates that staff may not be well prepared to advise the minister when EPP measures should be utilized. The manual simply brings these measures to the staff's attention without explaining the types of circumstances in which they may be applicable. Ministry staff should be instructed on the use of EPP to ensure that these measures are being used to the fullest extent possible.

The public also has little knowledge of the potential for EPP measures. Postings on the Registry do not indicate the class of the instrument being posted or that EPP measures may be available, as set out above. An important consideration for ministers in determining whether to initiate EPP measures should be whether members of the public request them or not. Yet, unless this information is presented with each posting, there will be little or no demand to use these measures.

Recommendation 45

MOE, MNDM, MCCR, MNR and MMAH should ensure that ministry staff are aware of and utilize EPP measures for Class II instruments in appropriate situations.

Recommendation 46

MOE, MNDM, MCCR/TSSA, MNR and MMAH should review and revise their *EBR* policy and procedure manuals to clarify and improve policies and procedures on the application of EPP methods for Class II instruments.

Recommendation 47

MOE, MNDM, MCCR, MNR and MMAH should ensure that all notices for instruments include information about the participation rights related to the instrument, the class of the instrument, and any additional participation opportunities that are associated with the instrument and can be implemented by the ministry. (For example, a Class I instrument notice should indicate that a member of the public may request that it be treated as a Class II instrument, and that the ministry can hold a public meeting or conduct a mediation process for a Class II instrument.)

Can the Public Influence Decisions?

Crematorium

Vaughan
Registry # IA7E0031

description A proposal posted on the Environmental Registry in early 1997 revealed that a company was asking for approval to construct a large crematorium in a Vaughan residential area. All eight existing crematoria in the Toronto area had only two furnaces each, but in this case the applicants were asking the Ministry of the Environment to approve a six-furnace crematorium.

public comments The ministry received more than 800 comments on this Registry proposal, some in the form of petitions. People argued that the facility was too close to densely populated residential areas, and they were worried about potential emissions of mercury, dioxins/furans, particulate matter and odour. When both the City of Toronto and local residents went to the Ontario Municipal Board to appeal the zoning changes Vaughan was planning for the crematorium, the applicants agreed to reduce the number of furnaces from six to two.

decision Because of the high level of public response, MOE reposted the Registry proposal several times, extended the original 30-day comment period to 95 days, and held a public meeting on the issue. In response to public concerns, the ministry required the applicant to carry out additional dispersion modelling to ensure that emissions would be within MOE requirements, and added a number of new conditions to the approval, which was finally issued in May 1998. The company was now required to remove casket handles; to operate continuous monitoring and control systems to minimize emissions; to develop annual inspection and complaint response programs; to provide operator training; and to operate equipment only between 8 a.m. and 10 p.m.

EBR public participation rights and Freedom of Information legislation

A member of the public requested the release of certain information under the *Freedom of Information and Protection of Privacy Act* (*FIPPA*) regarding a Registry proposal involving an application by a corporation for a certificate of approval to discharge air emissions. At first, the Ministry of the Environment agreed to provide the information, but the corporation objected and appealed to the Information and Privacy Commissioner (IPC) to prevent MOE from releasing it. The ECO was invited by the IPC adjudicator and agreed to make a submission.

In the submission, the ECO noted that the right to participate in environmental decision-making is more than a simple procedural right. It encompasses a substantive right to know the basis for a decision and have one's input considered by decision-makers. A natural extension of this right is that people should have adequate information to be able to form an opinion and contribute meaningfully to the decision-making process. Although the public participation aspects of the *EBR* do not specifically set out the information that should be disclosed, members of the public should have access to most of the same information that government decision-makers are relying upon in making a decision.

The ECO has consistently maintained that adequate information is necessary for the effective functioning of the *EBR* and has always urged ministries to provide the public with as much information as possible. Both the 1994-1995 and 1997 ECO annual reports recommended that ministries ensure that full contact information be included in every Registry notice and that details be provided on where the public could find more information. An ECO special

report to the Legislative Assembly of Ontario in October 1996 also expressed concern that ministries failed to provide timely information to the public.

The public's right of access to information may conflict with an applicant's proprietary rights. Nevertheless, the scope of an applicant's proprietary rights is limited under *FIPPA* to situations where the information is supplied in confidence and where release of the information would harm the applicant's commercial interests. These proprietary rights must be balanced against the public's interest in obtaining information necessary to understand the environmental implications of certain proposals.

The need for adequate disclosure of information is reflected in the purposes of the *EBR,* which stress the need for public participation in environmental decision-making. Moreover, the right to comment and the *EBR*'s leave to appeal provisions are predicated on the disclosure of relevant information. It is the ECO's perspective that the interpretation of the applicable provisions of the *FIPPA* in relation to the purposes of the *EBR* should balance an applicant's proprietary rights with the public interest goals provided by the *EBR*. This decision is still pending.

The Nova Group Permit to Take Water

The Nova Group Permit to Take Water (PTTW) from Lake Superior exemplifies how environmentally significant an instrument can be.

On April 2, 1998, MOE issued a permit to the Nova Group Limited to take 600 million litres of water over a period of five years from Lake Superior. The company intended to export the water by ocean tanker to Asian countries for sale as drinking water. PTTWs are Class I instruments under the *EBR*, and MOE posted the proposal to issue the permit on the Environmental Registry for a minimum period of 30 days. However, it did not undertake any further public consultation, despite the environmental significance of the proposal.

No comments were received on the proposal within the 30-day comment period, but the public eventually did become aware of the permit through the Environmental Registry. MOE's decision to issue the permit then drew widespread attention from the public, national and international media, the federal government of Canada, some U.S. states bordering on the Great Lakes, and various U.S. and Canadian government agencies. The concern was that a dangerous precedent could be set under the terms of the North American Free Trade Agreement. Under this Agreement, once water becomes a tradeable commodity, it may be difficult for the Canadian government to restrict trade in water resources, with potentially devastating effects on the Great Lakes and on Ontario's more than 225,000 lakes and streams. Questions were also raised about whether the permit violated terms of the Bilateral Boundary Waters Treaty of 1909.

After receiving intense negative feedback from the public and from the Canadian federal government and U.S. politicians, the Minister of the Environment stated that he did not support the export of Ontario water resources or any diversion from the Great Lakes. On May 14, 1998, MOE posted an information notice on the Registry for a policy entitled "Surface Water Transfers Policy" (Operations Division, MOE). The information

notice stated that the policy "sets out the process to be followed by Ministry staff and relevant concerns to be considered for reviewing permits to take or transfer surface water." In late 1998, MOE posted a further notice indicating its intention to make this policy a regulation under the *Ontario Water Resources Act*. (For further information on this issue, see Appendix C to this report.)

After issuing the Surface Water Transfers Policy, the ministry also revoked the Permit to Take Water originally granted to the Nova Group. The company appealed the cancellation of its permit on several grounds, including that MOE exceeded its jurisdiction in relying upon the Surface Water Transfers Policy released on May 11, 1998, since the permit was issued on March 31, 1998. The Nova Group withdrew its appeal shortly before a scheduled hearing after signing a Memorandum of Understanding with MOE. The MOU recognized the Nova Group's interest in the bulk export of surface water from the Great Lakes and its desire to participate in the future development of water export policy in Ontario.

This example highlights how important individual instruments can be for environmental protection. It also highlights the need for the ministry to identify situations requiring enhanced public participation, and to consult with the public and other stakeholders about key instruments that may have significant individual and cumulative environmental implications. Although the ministry complied with the requirements of the *EBR* by posting the Nova Group proposal on the Registry for 30 days, additional public consultation might have changed its initial decision to issue the permit. This in turn could have avoided the need to cancel the Nova Group permit and avoided the appeal process. In sum, the *EBR* provides for further means of public participation to be used in appropriate situations, and the Nova Group permit to take water is a good example of an instrument that would have benefitted from broad consultation.

Unposted Instruments

One area of ongoing discussion between the ECO and the Ministry of the Environment concerns the ministry's policy not to post certain proposals for Class III instruments on the Environmental Registry. In the *EBR*, Class III instruments are defined as those where the law requires a ministry to hold a public hearing to determine whether the instrument should be granted. With regard to this kind of instrument proposal, the *EBR* says that the Minister of the Environment should "do everything in his or her power to give notice to the public . . . at least thirty days before a decision [is] made whether or not to implement the proposal."

In the past two years, I have reviewed a number of environmentally significant Class III instruments that MOE failed to post on the Environmental Registry. All of the decisions related to approvals under the *Environmental Protection Act* or the *Ontario Water Resources Act* and all involved hearings before the Environmental Assessment Board. Several examples were outlined in the Supplement to the ECO's 1997 annual report.

In reply to my inquiries about this compliance issue, MOE takes the position that notice on the Environmental Registry under the *EBR* is not required because these instruments are subject to the exceptions under the *EBR* that apply to instruments that are issued by the ministry after a tribunal has held a public hearing.

MOE's application of this exception to these instruments is incorrect, and a serious breach of the *EBR*'s notice requirements. The exception invoked by MOE applies only to instruments that are issued by MOE after a tribunal has held a public hearing, not before it takes place. As a result of these omissions by MOE, members of the public were deprived of their right to receive notice on the Environmental Registry of important proposals, did not learn about the opportunity to participate in the public hearings, and were unable to contribute to the Environmental Assessment Board's deliberations.

The other type of Class III instrument not placed on the Registry for public comment which I reviewed in 1998 were approvals for new landfills. MOE claims the *EBR* notice and comment requirements do not apply because the issued instruments for the landfills were steps toward implementing undertakings approved under the *Environmental Assessment Act (EAA).* While MOE's use of this type of exception is technically correct, MOE has nevertheless acknowledged that the Registry represents an excellent way of sharing information about public hearings. In March 1998, MOE said that in the future ministry staff will use the Registry to post information notices about such hearings. I agree that MOE should post information notices about the issuance of these Class III instruments.

Despite its March 1998 commitment to post information notices about Class III instruments for *EPA* approvals, MOE failed to post an information notice about an application for a certificate of approval by the Town of Haileybury to construct and operate a landfill that was referred to the EAB for a hearing. After the hearing for the Haileybury proposal and the release of the EAB decision in October 1998, the ECO contacted MOE to point out that the ministry had failed to post a notice of the EAB hearing on Haileybury's application. Subsequently, in mid-October, MOE did post an information notice about an *EPA* approval sought by a company in Cornwall which intends to burn PCB wastes, including light ballasts, capacitors, cables, soil and other debris. The notice states that the matter will be referred to the EAB for a hearing. This time residents interested in these proceedings had the benefit of this public notice opportunity.

It is hoped that in the future MOE will alert the public of hearings on proposals for all Class III instruments through postings on the Environmental Registry, and the ECO will continue to monitor whether the ministry does so.

Recommendation 48

MOE should ensure that notices of Class III instruments are posted on the Environmental Registry for public comment before decisions are made by the ministry on whether or not to implement the proposals.

Other Legal Rights

Members of the public have begun to use several of the other legal rights made available to them by the *EBR*. They are using these rights to fight a water taking permit for a quarry and to challenge an approval for spreading paper sludge on agricultural land. A group of small businesses has sought to appeal an approval for a waste transfer station. In one case, a leave to appeal a landfill site approval was granted in 1998. In another case, members of the public are using the right to sue for public nuisance and an action to sue for harm to a public resource.

The *Environmental Bill of Rights* gives several important legal rights to the people of Ontario. They now have the right to appeal certain government decisions; the right to sue if someone is breaking, or is about to break, an environmental law and is harming a public resource; and the right to sue for compensation for direct economic or personal loss because of a public nuisance that is harming the environment. Under the *EBR*, Ontarians also have protection against reprisals for reporting environmental violations in the workplace.

Appeals

The *EBR* allows members of the public to apply for leave to appeal ministry decisions to issue certain instruments, such as the permits, licences or certificates of approval that ministries issue to industrial facilities. (Neighbours, for example, may want to appeal the approval given to a company to discharge chemicals into the environment.) The person asking for the permission to appeal a permit or licence must apply to the proper appeal body, such as the Environmental Appeal Board (EAB), within 15 days of the decision being posted on the Environmental Registry. They must show they have an "interest" in the decision, that no "reasonable" person could have made the decision, and that it could result in significant harm to the environment.

Status of appeals

At the beginning of 1998, no applications for leave to appeal by members of the public were pending before the Environmental Appeal Board. Of the four applications for leave to appeal that were posted on the Environmental Registry during the year, two were denied, one was granted, and one was withdrawn. In addition, one case in which leave to appeal was granted in 1997 continued to progress during 1998. Seventeen "instrument holder" notices of appeal were posted on the Environmental Registry as well during the year. The *EBR* requires the ECO to post notices of appeals launched where individuals or companies were denied an instrument or were unsatisfied with the terms and conditions contained in the instrument. These instrument holder appeals give notice to members of the public who may decide to become involved with such an appeal.

The requirement to decide a leave to appeal application within 30 days

In order to ensure that the appeal process does not unduly hold up approvals, the *EBR* requires that appeal tribunals decide whether to grant leave to appeal within 30 days after an application is filed. However, in practice, the 30-day time limit is often difficult to meet due to extensions requested by the parties, the large amount of background documentation required, the need to provide an opportunity to the Ministry of the Environment and the instrument holder to respond to the applicant's submission, and the need for the applicant to reply further to these responses.

Procedural improvements made in 1997 and 1998 by the Environmental Appeal Board have significantly reduced delays. The three Appeal Board decisions on leave to appeal applications made in 1998 were made within 50, 63 and 55 days of filing by the applicants.

Residents fight water taking permit for quarry[1]

In June 1997, two residents of southwestern Ontario sought leave to appeal an MOE decision to grant a permit to take water to Dunnville Rock Products Ltd. (DRP) for the purposes of quarry dewatering (i.e., pumping water out of the quarry). The dewatering activity is necessary to allow the company to operate its equipment and remove aggregate material. The applicants own residential property near the quarry operated by DRP and rely on well water for drinking and domestic uses.

The applicants argued that MOE's decision to issue a new permit to take water was unreasonable because the ministry failed to impose conditions ensuring that the objectives of MOE's Water Management: Goals, Policies, Objectives and Implementation Procedures were met, that the permit will interfere with the applicants' interest in water, that the ministry did not consider DRP's non-compliance with previous permits, and that the information in DRP's Aquifer and Water Management Strategy was inadequate. They also claimed that

1 Ricker v. Director, Ministry of Environment and Energy, Unreported Decision of the Environmental Appeal Board, EAB File EBR0019.L1, September 3, 1997.

the decision could result in significant harm to the environment through interference with the use of the applicants' well and wells of neighbours, damage to animal life, and damage to the property of the applicants.

In its decision, the Environmental Appeal Board granted leave to appeal the permit to take water. The appeal hearing on this case was scheduled to begin in 1998, but the parties first attempted to settle the case. An interim agreement was tentatively reached by the parties, but when the Environmental Appeal Board did not approve a term in the agreement, a hearing was scheduled for February of 1999. The ECO will continue to monitor this case.

Residents challenge approval for paper sludge spreading on land[2]

In August 1998, four separate applicants who own residential property near the site in question sought leave to appeal an MOE decision to grant a certificate of approval to a company called Agribond. The company proposed to spread approximately 167 tons per day of biosolids or bio-mass material from St. Mary's Paper onto land and allow it to sit for a few months, a process Agribond says will convert the material to a compost-like soil conditioner.

The applicants argued that the biosolid material does not heat up to the minimum composting temperature of 55 degrees centigrade and biodegrade in the way that compostable material does normally. Therefore, the applicants say, it should not be considered to be compost. The applicants also argued that MOE failed to protect air quality in the vicinity of the site, and that there could be a hazard to human health arising from the airborne bioaerosols and contaminants. According to the applicants, the instrument should have included a provision for financial assurance in case funds for site cleanup are required; the wetlands and endangered species on the site were not adequately evaluated; and MOE failed to address concerns that contaminants contained in the paper mill sludge waste could leach into groundwater.

2 Hannah v. Director, Ministry of the Environment, Unreported Decision of the Environmental Appeal Board, EAB File 98-043, September 16, 1998

In mid-September 1998, the Environmental Appeal Board denied the applicants leave to appeal. The Board relied on a report by a senior material specialist at MOE who contended that "the risk to the general public due to bioaerosols from composting facilities is very small." The Board also found that the amount of toxic organics (i.e., dioxins and furans) in the paper sludge were "well below" ministry guidelines for application to agricultural soil. Finally, the Board concluded that the certificate of approval issued by the ministry is "a comprehensive instrument" that meets "state-of-the-art requirements and standards" for composting as set out in MOE's Interim Guidelines for the Production and Use of Aerobic Composting in Ontario (1991).

The Board went on to recommend that, "in the spirit of the *EBR*," MOE staff should take the initiative "to arrange a meeting of the applicants, Agribond and MOE by October 31, 1998, for the purpose of explaining how the certificate of approval issued to Agribond will ensure the health and safety of all persons and the protection of the environment." In addition, the Board said that such a meeting would provide an opportunity for the company to explain how it will fulfil its management responsibilities under the certificate of approval and an opportunity as well to discuss possible regulatory gaps such as the complaint procedure and off-site monitoring of the operation. The Board also offered to facilitate such a meeting.

MOE agreed to have the recommended meeting and the chair of the Environmental Appeal Board acted as the mediator for the session. However, only two people attended and, according to one of the applicants who did attend, the meeting was unsatisfactory and his concerns still remain unaddressed. The residents have indicated a continued interest in other legal actions against MOE and the company. The ECO is monitoring this dispute.

Appeal of a waste transfer station approval[3]

In early September, a leave to appeal application was filed on behalf of 17 small and medium-sized companies operating in a light industrial area in Etobicoke in the City of Toronto. The companies sought leave to challenge an MOE decision to grant a provisional certificate of approval for a waste transfer station to Recycle Plus Limited. The decision permits the facility to receive up to 383 tonnes per day of solid nonhazardous waste for the purposes of recycling, including glass, paper products, plastics, metal and food waste. The applicants' leave to appeal application contained several grounds, including that Recycle Plus had previously been operating without MOE approval. The application argued that the operation would cause adverse impacts, including odours, litter, vermin, waste spills on municipal and private property, and leachate contamination of soil, ground water and surface water; that the collective effect of the various nuisance impacts from the operation on the local area would cause significant harm to the environment, material discomfort to the neighbours, and interfere with the conduct of business; and that the terms and conditions of approval would not mitigate these impacts.

3 Aegean Enterprises and Others v. Director, Ministry of the Environment, Unreported Decision of the Environmental Appeal Board, EAB File 98-057, November 12, 1998.

The Board denied the application for leave to appeal. It found that the concerns of the applicants relating to odours, amounts and types of waste, rodents and financial assurance were considered by MOE in granting the certificate of approval. The Board further noted that the adequacy of the conditions contained in the certificate of approval depends upon whether the instrument holder is complying with the conditions and whether those conditions are being enforced. It found that in the event of a lack of compliance, MOE may take further action, including prosecuting the instrument holder, revoking the certificate of approval, or revising and amending conditions as circumstances present themselves. The Board suggested that MOE revisit the financial assurance condition in response to comments made in the submissions by the parties, and noted the need to monitor this facility carefully, especially in regard to the site operations and record-keeping requirements.

Appeal of a landfill site approval[4]

In November 1998, seven separate applicants living in southwestern Ontario sought leave to appeal a decision to grant a certificate of approval to a company called the Ridge Landfill Corporation (Ridge Landfill). MOE's decision involved an amendment to the certificate of approval to extend the time for which the site is able to accept industrial, commercial and institutional (IC&I) waste from all of Ontario. The date was extended from December 21, 1998, to the date upon which the site reaches approved capacity, a time of approximately 20 years.

The applicants sought leave to appeal the decision to grant the amendment to the certificate of approval to the site on several grounds, including:

1. There is no demonstrable need for an all-Ontario IC&I waste service area for the landfill.
2. The amendment attempts to circumvent the minister's approval to expand the landfill site under the *Environmental Assessment Act (EAA)*, dated June 24, 1998. This approval was based upon the service area in force at that time. The amendment effectively expands the scope of the *EAA* approval.
3. The amendment permits IC&I waste disposal upon lands which are not zoned for waste disposal uses.
4. The proponent has a lengthy history of non-compliance with applicable regulatory requirements.
5. The amendment is contrary to relevant MOE policies, guidelines and directives.
6. The amendment is inconsistent with the purposes of the *EPA* in that the landfill may create a nuisance, is not in the public interest, and may result in a hazard to the people's health.
7 There have been inadequate public notice and comment opportunities regarding the amendment.

4 Thompson v. Director, Ministry of the Environment, Unreported Decision of the Environmental Appeal Board, EAB File 98-082, December 29, 1998.

8. The applicants have suffered actual environmental and nuisance impacts arising from the operation of the landfill site.
9. There is no meaningful mechanism for timely or effective monitoring and enforcement activity at the landfill site.

In granting the leave to appeal application, the Board found that the amendment to the certificate of approval allowing the landfill to accept IC&I waste from all of Ontario circumvents an earlier minister's approval to expand the landfill site under the *Environmental Assessment Act (EAA)*. The Board found it extraordinary that the instrument-holder sought to continue its all-Ontario service area for IC&I waste through an amendment to its certificate of approval and not through the environmental assessment process. The Board also found that the use of the two approval processes — one under the *EAA* and another under the *EBR* — created undue confusion and made it difficult for the ordinary resident to consider and respond to the proposal, which involved a fourfold expansion of the landfill site capacity and would allow the instrument holder to dispose of waste for another 20 years. Considering the purposes of the *EBR*, which encourages the public's participation in and access to environmental decision-making, the Board found that MOE's decision to grant the amendment to the certificate of approval was not reasonable. The Board also accepted the applicants' submission that waste disposal is an environmentally significant activity with considerable potential to cause off-site impacts to the environment, nearby residents, and public health and safety.

This appeal was withdrawn in January 1999.

The Right to Sue for Public Nuisance

Any person in Ontario who experiences direct economic or personal loss because of a public nuisance causing environmental harm may sue for damages or other personal remedies under the *Environmental Bill of Rights*. There is an exception for farmers, who may be protected against public nuisance lawsuits relating to odour, noise, dust, vibration, flies, smoke and light under the *Farming and Food Production Protection Act, 1998*. Individuals in most other parts of Canada can sue only if certain strict conditions are met — conditions based on common law rules developed over several decades. The *EBR* eliminates the need to get the Attorney General to take the case on behalf of the plaintiffs or to get the consent of the Attorney General to undertake an action. The *EBR* also clarifies that direct damages are recoverable and specifies that the person does not have to suffer unique economic damages or personal injuries to make a successful claim.

Update on first public nuisance case

Last year I reported on the first public nuisance case filed in Ontario relying on the *EBR*. This case was a class action filed in Whitby on behalf of 30,000 residents in Maple and Richmond Hill, who are suing the City of Toronto over its operation of the Keele Valley Landfill site. In order to proceed, the action must first be certified by a court as a class action. Initially, the case received the required certification.[5] However, the City of Toronto appealed the original court decision, and on the appeal the court refused to certify the class as requested on the basis that the evidence did not support the position that all 30,000 residents had suffered nuisance impacts from the landfill.[6] This decision has been further appealed to the Ontario Court of Appeal. Until these procedural matters related to the class proceeding are resolved, the issues related to the public nuisance aspect of the case remain on hold. The ECO will continue to monitor this case.

The Right to Sue for Harm to a Public Resource

The *Environmental Bill of Rights* gives Ontarians the right to sue if someone is violating, or is about to violate, an environmentally significant Act, regulation or instrument, and has harmed, or will harm, a public resource.

The owners of a farm in Grey County commenced legal proceedings against Max Karge, the owner of a property adjacent to their farm, and the Ministry of the Environment in relation to an illegal tire dump on Karge's land.[7] They allege that the dump has contaminated the subsoil, groundwater, and surface water in the surrounding vicinity, including their well water. They further allege that MOE bears considerable responsibility for the situation because ministry staff negligently authorized burying tires, acted negligently in monitoring and inspecting the property, and failed to enforce pollution laws in relation to activities at the dump.

The situation first arose in 1991, when the owner of the property, under the supervision of MOE staff, buried more than 33,000 scrap tires at the site. MOE testing in 1994 revealed that the contaminants from the tires are toxic to fish and other aquatic life, and a groundwater specialist at MOE recommended that the tires be removed. Testing done in 1997 found water at the site is contaminated with chemicals in concentrations that greatly exceed levels permitted under the Provincial Water Quality Objectives. In March 1998, MOE announced that the tires would be removed, and contractors hired by the ministry began work in the summer of 1998. However, when MOE refused to remediate the contaminated groundwater as well, the claimants pursued their action. Notice of the action was posted on the Environmental Registry in November 1998.

The ECO will monitor this case.

5 Hollick v. City of Toronto (1998), 27 Canadian Environmental Law Reports (N.S.) 48, (Ont. Gen. Div.).

6 Hollick v. City of Toronto (1998), Unreported Decision, September 28, 1998 (Ont. Div. Ct.).

7 Braeker v. Attorney General, Action Filed in Ontario Court (General Division), Owen Sound, July 27, 1998, Court File 3332/98.

Whistleblower Rights

The *Environmental Bill of Rights* protects employees from reprisals by employers if they report the unsafe environmental practices of their employers or otherwise use their rights under the *EBR*. There were no whistleblower cases in 1998.

Ministry Compliance with 1997 Recommendations

Each year, I follow up on progress made by the ministries in implementing recommendations made in previous years. This year, I have reviewed in detail ministry progress on several 1997 recommendations, including a groundwater management strategy for Ontario and Registry consultation on the selling of Crown lands. Further follow-up reviews, including public consultation in the Lands for Life planning process (see p. 122), occur throughout this report, and others will be reported in upcoming years.

In these reviews, I have used reports submitted to me by the ministries as well as analyses carried out by my staff.

Groundwater management strategy for Ontario

In my first annual report, I recommended that a number of ministries work together to upgrade Ontario's groundwater management framework. I have continued to follow and make recommendations on this issue in subsequent annual reports. In the past four years, the Ministry of the Environment has indicated to me several times that it is working with other ministries to develop a groundwater management strategy, and included a commitment to do so in its 1996 Business Plan. In my 1997 annual report, I recommended that MOE and the other involved ministries should make public the progress they have made to date in developing a groundwater strategy, and indicate when the strategy is expected to be completed. However, no information on the status of this strategy has been made public.

In their 1998 reports to me, the four ministries involved in the development of the strategy (MOE, and the Ministries of Natural Resources, Municipal Affairs and Housing, and Agriculture, Food and Rural Affairs) all provided me with very different responses about their progress toward developing a groundwater management

strategy. MOE noted that it continues to work with a number of provincial ministries and other agencies to ensure the protection and wise management of groundwater. MOE listed a number of actions it has taken to enhance groundwater protection, but did not provide information on the status of the comprehensive groundwater management strategy. Although MNR, MMAH and OMAFRA all reported that they were continuing to participate in the MOE-led development of a groundwater management strategy, each provided very different updates on its status. While MMAH indicated that it is too early in the process to release information on the strategy to the public, MNR reported that a draft document would soon be made public, and OMAFRA reported that a draft of the strategy is under review.

While it appears that MOE, in partnership with the other ministries, is taking some action to monitor and provide information about groundwater, the ministries have failed to make clear their progress in developing a groundwater strategy. The ministries have not yet announced any plans for developing a province-wide strategy to protect groundwater, and it is unclear whether they plan to do so.

Registry consultation on selling of Crown lands

In 1997, I recommended that MNR should ensure that all Ontarians be able to comment on decisions about the disposition of public lands. (Land "disposition" includes issuing permits to use Crown land, as well as selling or leasing such land.) I recommended that MNR post on the Environmental Registry the ministry's annual province-wide plans and targets for disposition of Crown lands, and all proposals to sell specific parcels of Crown land.

POSTING PROPOSED SALES OF PARK LANDS ON THE REGISTRY

Under the *Environmental Bill of Rights*, MNR is required to post proposals for policies or regulations that would result in the sale of park lands, such as proposed major amendments to District Land Use Guidelines or the deregulation of parks. In August 1998, MNR posted a proposal to sell Peche Island Provincial Park, which includes a 43-hectare island near the City of Windsor.

MNR said it was proposing to sell the park because it was too expensive to operate, considering its value to the Provincial Parks system. The park has no significant natural heritage values, according to the ministry, with the possible exception of a wetland. This wetland had not yet received a standard assessment, but could be a Class 3 wetland. (Ontario wetlands are ranked from Class 1 to 7, depending on how environmentally important they are, and Classes 1-3 are designated as provincially significant.)

MNR provided a 45-day comment period, and explained that additional public notice would be provided, including notices to local residents and stakeholders, and ads in local newspapers. MNR did not post a decision on this proposal in 1998.

MNR has committed to implementing part of my recommendation. The ministry indicates that each year it will post its general strategy, explaining the types of land to be marketed, the approximate number of dispositions expected, and the overall revenue target for that year. MNR did not post this information during 1998, although it did post an information notice providing members of the public with some general information about MNR's land disposition program (called the "Strategic Lands Initiative"). I will monitor whether MNR posts its annual land disposition strategy in 1999.

MNR indicates that it will post any environmentally significant policy changes relating to its land disposition program. During 1998, the ministry posted a number of new or revised policies related to land disposition.

MNR has informed me that it does not plan to post proposals to sell specific parcels of Crown land. The ministry argues that it is impractical and unnecessary to post each disposition of Crown land because the ministry grants hundreds of dispositions each year, most of which are unlikely to have a significant effect on the environment. MNR notes that although the ministry is proposing to classify some of these dispositions in its *EBR* instrument classification regulation, most of them will be exempted from Registry posting requirements because they are covered under an *Environmental Assessment Act* Exemption Order. The ministry indicates that where a land disposition may have significant effects on the environment, staff will "consider carefully whether *EBR* consultation will occur to complement public consultation required by the Exemption Order."

Protection for Ontario's roadless wilderness

Although many Ontarians envision vast areas of forested wilderness in the north of the province, in reality, the amount of roadless wilderness in Ontario is small and constantly declining. Some experts estimate that there are fewer than 50 roadless areas larger than 10 square kilometres left in central and northern Ontario (for comparison, Algonquin Park is 7,725 square kilometres). As a result of concerns about the declining amounts of such wilderness areas, MNR was required to develop a wilderness policy as a condition of the Timber Management Class Environmental Assessment approved by the Environmental Assessment Board in 1994. In 1997, MNR developed the required policy.

Many people commenting on a draft version of the policy were very unhappy that it provided no guidance on how roadless wilderness areas outside parks were to be protected. In response to comments, MNR modified the policy, adding a commitment to consult with clients and partners about the need for additional measures to protect wilderness. I recommended in my 1997 annual report that MNR clarify its policy on protection of roadless wilderness areas outside parks, and provide direction on how the policy should be applied during forest management planning.

MNR's progress in revising the wilderness policy has been very slow. It took MNR nearly a year (until March 1998) from the time it committed to reviewing the policy to assemble an internal working group to begin the review work. MNR indicated when it established the working group that a report would be available for public consultation by early fall 1998. The working group did not meet that deadline. Ministry staff indicated in early

1999 that the group had completed a draft report, but had not yet received senior management approval to begin consulting on it. As a result of the lack of progress in reviewing the policy, clear provincial direction on protection of roadless wilderness areas outside parks was not available to the Lands for Life Regional Round Tables.

Slow Progress on Developing Air Standards

Although MOE publicized its plan to update air standards as an aggressive approach to protecting Ontario's environment, the ECO review of MOE's actions showed the ministry's progress to be feeble. The ministry said it would update the standards for 70 pollutants over three years, when, in fact, it took MOE approximately two years to finalize the rules pertaining to only nine pollutants. Even for those few pollutants, MOE merely created guidelines rather than directly enforceable standards.

In late 1996, MOE posted a three-year plan for standard setting, outlining the ministry's plans and priorities for developing or updating a variety of air, water, soil and sediment standards. Priority was placed on air standards. MOE continues to cite this plan as evidence that it is "aggressively pursuing ...measures for the air we breathe." I have reviewed MOE's progress toward developing the air standards outlined in the plan and the transparency of the standard-setting process, and found that both are lacking.

MOE's progress in developing the air standards in the three-year plan has been slow. In 1996, MOE indicated that it planned to develop or update standards for 70 priority air pollutants by 1999. At that time MOE was already working on 25 of these standards, and expected to complete 17 of them during 1997. However, MOE did not finalize any of these standards in 1997, and by the end of 1998 had made decisions on only nine.

Stakeholders raised concerns about the nine new standards when they were posted on the Registry for comment in March 1998. An environmental group noted that some of the standards MOE was proposing were less stringent than those the ministry had proposed during earlier consultations held in January 1997.

In the end, MOE did not develop directly enforceable standards for the nine pollutants, but guidelines only. (See discussion of the difference on the next page.) For some pollutants, this was a retreat from the earlier January 1997 proposal, which was to create standards. For example, for ethylene dichloride, carbon tetrachloride, and 1,4 dichlorbenzene, MOE originally proposed developing point of impingement (POI) standards, but ended up developing only guidelines. For two other pollutants (methylene chloride and tetrachlorethylene), proposals to develop POI standards were dropped entirely. Instead MOE developed only Ambient Air Quality Criteria (AAQCs) for these pollutants.

In early 1999, MOE posted "information drafts" for an additional 18 air pollutants. These drafts present current toxicological information and information on guidelines and standards used in other jurisdictions that MOE is reviewing to develop new standards. The drafts do not propose new standards, and ask commenters to provide any additional information that MOE should consider, and to comment on the technical and eco-

nomic implications of developing new standards for these pollutants. Based on the information contained in the drafts and the comments received, MOE will develop proposed new air standards or guidelines, and post them on the Registry for comment. Given the fact that it took MOE almost two years to finalize guidelines for the first nine pollutants, it is unlikely that decisions on these 18 air pollutants will be finalized in 1999.

STANDARDS AND GUIDELINES — WHAT'S THE DIFFERENCE?

MOE uses both air quality **standards** and air quality **guidelines** in its efforts to monitor and control air pollution. Standards and guidelines are used in different ways.

Standards

Standards are listed in Regulation 346 under the *EPA* as maximum permitted concentrations of various pollutants. This regulation makes it illegal for any person to permit a concentration of a contaminant at a point of impingement that exceeds the concentration listed in the regulation. A "point of impingement" (POI) is the point at which a contaminant from a given source is expected to come in contact with the ground. All pollution sources are required to comply with POI standards set out in Regulation 346, unless they are specifically exempted by regulation. MOE uses POI standards when reviewing and issuing certificates of approval for air emissions. MOE indicates that it generally develops POI standards (as opposed to guidelines) for substances which are considered of greater risk, because they are released in large quantities from a large number of sources and because the potential for exposure is high. MOE considers factors such as cost and technical feasibility before setting POI standards.

Guidelines

MOE also uses POI guidelines. Unlike POI standards, POI guidelines do not automatically apply to existing sources, nor can they be used directly as enforcement tools by the ministry. MOE uses them in approving certificates of approval for new or modified emission sources. If the ministry incorporates a POI guideline into certificate of approval, it becomes legally binding. According to MOE, it usually develops POI guidelines (instead of standards) for substances that are released from relatively few sources and that can best be managed on a case-by-case basis.

MOE also has guidelines called Ambient Air Quality Criteria (AAQC). They are used to assess general air quality, and are not directly enforceable. AAQCs are expressed as a concentration of a pollutant in a volume of ambient air, averaged over a specified time period, e.g., parts per million averaged over 24 hours.

Both AAQCs and POI guidelines are set at levels that are expected to protect human health and the environment from adverse effects. Social and economic factors such as technical feasibility and costs associated with achieving the limits are not generally considered when setting such guidelines.

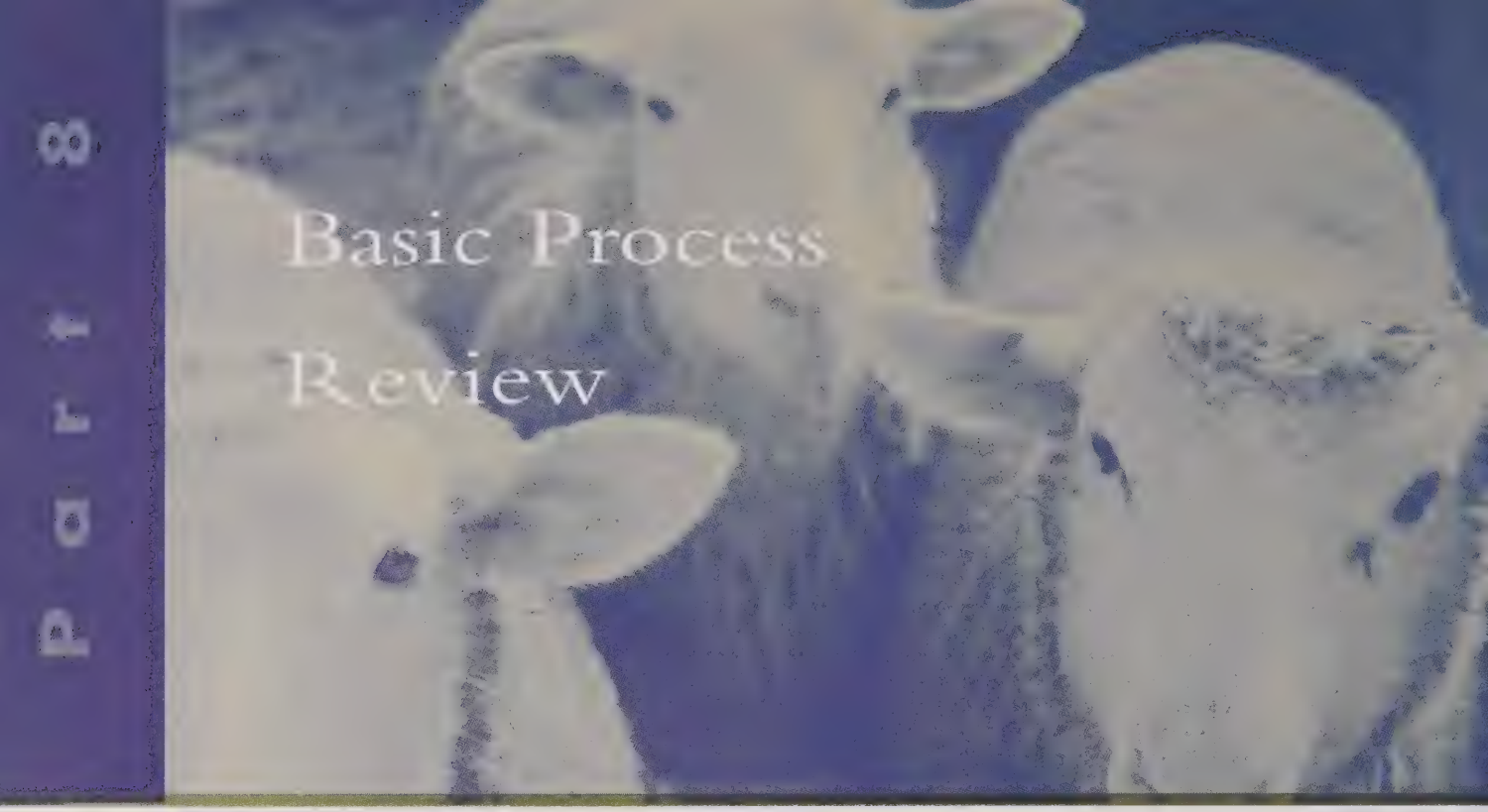
ECO Commentary

Last year, I recommended that MOE provide regular updates on its three-year standard setting plan. The plan itself indicated that the ministry would provide yearly updates on the Registry. However, no updates have been provided as of December 1998. MOE should update its plan to provide members of the public with current information on the ministry's progress in developing air standards listed in the plan and its future priorities for standards development.

MOE should also consult with the public on its overall process for setting standards. During 1998, MOE developed a backgrounder on the development and implementation of air quality standards. However, this backgrounder was provided only to selected stakeholders, and was not posted on the Registry. It outlines MOE's proposed process for developing air standards, including priority-setting, how stakeholder consultation will occur and at what stages, and how new standards might be implemented. While MOE's three-year plan contains some general information about standards development, the backgrounder provides considerably more detailed and current information on the ministry's plans in this area, and should have been available to the public. When I learned about this discussion paper, I suggested that MOE post it on the Registry for public comment. MOE declined, and indicated that "the backgrounder allowed us to have very early dialogue with stakeholders so that we can start to formulate a proposal for public consultation." I encourage MOE to develop this proposal quickly and to post it on the Registry so that Ontarians have a chance to comment on the standards development process.

Recommendation 49

MOE should post an update on its standard-setting plan to provide members of the public with current information and an opportunity to comment on the ministry's progress and priorities in developing standards, and, more broadly, how standards are developed and applied.



Basic Process Review

Review of Ministries' Use of the Environmental Registry

Good environmental decision-making needs good public consultation, and the Environmental Registry was established with that in mind. Every year, I review and analyse policies, Acts and regulations posted on the Environmental Registry. I do this to evaluate whether ministries are complying with the posting requirements of the *EBR*, and whether they are implementing Registry-related recommendations that I have made in my past annual reports.

During 1998, the following ministries posted policies, Acts and/or regulations on the Registry for comment: the Ministries of Agriculture, Food and Rural Affairs; Environment; Natural Resources; Municipal Affairs and Housing; Transportation; Consumer and Commercial Relations (and Technical Standards and Safety Authority); Northern Development and Mines; Citizenship, Culture and Recreation; Management Board Secretariat; and Energy, Science and Technology. Three ministries — Health; Labour; and Economic Development, Trade and Tourism — did not post any proposals.

Increasing use of the Registry

Ministries are posting more proposals on the Environmental Registry. There were 173 policy, Act and regulation postings in 1998 (compared with 98 in 1997). MNR's increasing use of the Registry is particularly notable. It posted 97 proposals in 1998 (compared with only 14 in 1996).

Comment periods

In my 1997 Report, I recommended that ministries should repost proposals that change substantially following their initial posting on the Registry. Ministries reposted several modified proposals in 1998. MNR reposted

its proposed regulations under the *Fish and Wildlife Conservation Act* once it had prepared and released the draft text of the proposed regulations. In early 1998, MOE posted a proposal to revoke two regulations that place restrictions on milk packaging. As a result of comments received, MOE revised its proposal, revoking only one of the two regulations, and posted this revised proposal for an additional 60-day comment period.

Ministries frequently provided comment periods longer than the 30-day minimum required by the *EBR*. Forty-three per cent of MOE postings had comment periods of more than 30 days, and almost one quarter had comment periods of more than 60 days. MNR provided extended comment periods for 49 per cent of its proposals.

For the most part, ministries are providing adequate comment periods on the Registry. However, ministries should have provided longer comment periods for some proposals. In fact, MOE posted a proposed Act (Bill 82) for a comment period of only 10 days. This is the first and only time that a ministry has posted a proposal for a policy, Act, or regulation for a shorter comment period than the 30-day minimum required by the *EBR*. Most of the other MOE proposals had adequate comment periods. MNR should have provided more than 31 days for the public to comment on the Consolidated Recommendations of the Lands for Life Round Tables. MMAH should have provided more than 30 days for comment on the *Greater Toronto Services Board Act* and the new *Municipal Act*.

Can the Public Influence Decisions?

Preliminary Management Plan

Mono Cliffs Provincial Park
Registry # PB6E3004

description The Ministry of Natural Resources (MNR) draft plan for managing the 732-hectare Mono Cliffs Provincial Park included the development of a picnic area and a 250-car parking lot. The plan also proposed restricting mountain biking and horseback riding to certain trails and closing other "unofficial" trails, since the site of the park, located in Dufferin County on the Niagara Escarpment, is highly diverse, containing 40 different "vegetation communities."

public comments Many of the 128 comments on MNR's draft plan dealt with trail use. Several people didn't want horseback riding and mountain biking to be limited to certain trails. Still others supported the idea. Some commenters recommended that the new park entrance be moved away from the centre of the park and that the proposed size of both the parking lot and picnic area be reduced.

decision MNR made several important changes to its final Management Plan in response to public comments. The proposed park entrance was moved further south, the capacity of the parking lot was changed from 250 cars to 100, and the size of the picnic area was decreased. The final plan also provided more protection to sensitive features in the park by reducing the area of development zoning and expanding the area of nature reserve zoning. MNR also maintained its plan to restrict mountain biking and horseback riding to certain trails.

Regulatory Impact Statements

I am pleased to report that MOE and MNR included Regulatory Impact Statements (RISs) in most of their regulation postings in 1998. The quality of the information in the RISs varied, however. For example, half of the RISs prepared by MOE did not describe the potential environmental effects of the proposal, and focused instead on social or economic effects. MNR's RISs, on the other hand, all contained some description of potential environmental effects (or the lack thereof).

Getting information on proposals

Most postings contained information on where members of the public could get written information on the proposal. However, many postings in 1998 included a standard note: "Some Government offices may have copies of this proposal for viewing. These are listed below." In some cases, the offices listed did not have copies of the proposal. Ministries should clearly indicate in proposal postings whether or not copies of the proposal are available.

Twenty per cent of proposal postings in 1998 included hypertext links to the text of proposed new policies, Acts and regulations. However, some of the links did not lead to information about the proposal. Registry postings should clearly indicate whether hypertext links lead to the text of the proposal or to background information.

Getting copies of decisions

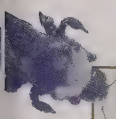
Decision postings should contain information on where members of the public can get a copy of the new policy, Act or regulation. In 1998, only 20 per cent of decision postings contained this information. Ministries are making efforts to provide electronic links to the final versions of some new policies, Acts and regulations. However, of the 15 links provided in 1998, only two actually led to the final document (many led to the draft). MOE's decision postings on regulations usually contained useful information on the regulation number of the final approved regulation, and the date it was filed with the Registrar of Regulations.

Posting decision notices

MNR has informed me that staff who have posted proposals are routinely reminded that they need to post decision notices. In spite of these efforts, MNR did not post decision notices on regulations promptly in 1998, taking on average 127 days to post decisions. The ministry did, however, post several policy decisions very promptly, within days of making a decision. MOE posted decisions on regulations fairly promptly in 1998, taking on average 48 days. This is an improvement over the previous year, when MOE took an average of 156 days to post regulation decisions. MCCR did not post decisions promptly in 1998. Failure by ministries to post decisions promptly means that members of the public cannot rely on the Registry for reliable information on the status of ministry proposals. Ministries should also ensure that decisions on regulations are not posted until the regulations are filed with the Registrar of Regulations.

Describing public comments

Several of MNR's decision postings failed to reflect accurately the number of comments received by the ministry. Two Registry decisions on park management plans indicated that the ministry had received no comments, yet an examination of the final plans revealed that comments were submitted and considered. Three other decision postings indicated that no comments were received, but then acknowledged elsewhere in the postings that many comments were submitted through consultation other than the Registry. These postings failed to describe the comments or their effect on the ministry's decisions, as required by the *EBR*. The *EBR* does not distinguish between comments received by a ministry as a result of posting on the Registry, and those received through other consultation.



THE EFFECT OF PUBLIC COMMENTS: MOE

MOE provided a very thorough notice on its decision to designate industrial by-products under the waste management regulation (so that these by-products would be subject to the regulation's waste approval requirements), and to exempt some specific by-products from the requirements. MOE explained that some industry commenters were opposed to the proposal to designate industrial by-products as waste, and that environmental groups supported the designation but had concerns about some of the exemptions MOE was proposing. MOE's notice provided further detail on several specific comments that were made, and clearly described whether the ministry made changes as a result of those comments. Where changes were not made, MOE provided reasons.

In my 1997 Annual Report, I encouraged ministries to include descriptions of the full range of comments received (including those that did not affect the decision). Several of MOE's decision postings included such descriptions, while most MNR postings did not. I continue to encourage ministries to describe the full range of comments received on posted proposals. Doing so enhances the transparency of the ministry's decision-making, and shows the public that the ministry considers all legitimate environmental concerns.

Recommendation 50

In decision postings, ministries should describe the effect of all comments received by the ministry, regardless of whether the comments were received as a result of the Registry proposal or though other consultation by the ministry.

Recommendation 51

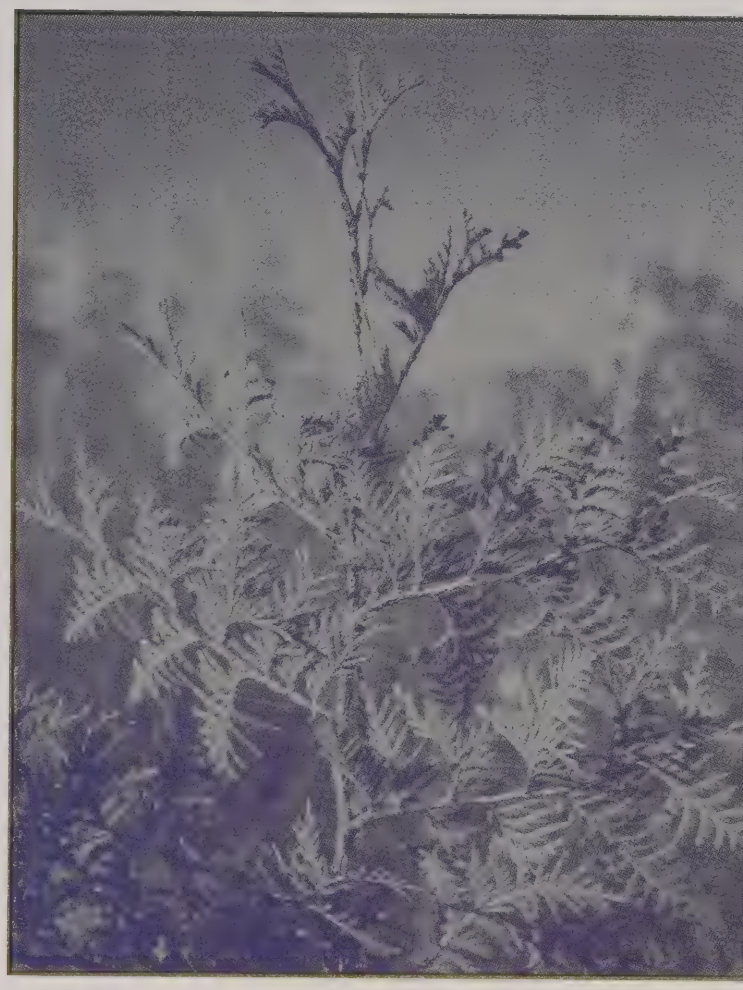
In decision postings on regulations, ministries should provide the regulation number and the date the regulation was published in the Ontario Gazette so that people know where to look for the final regulation.

Recommendation 52

Ministries are encouraged to continue providing hypertext links in Registry postings wherever possible, and are encouraged to ensure that relevant information is available where links are provided.

Quality of Instrument Postings

During 1998, the ECO evaluated the quality of information in ministry instrument postings to determine whether postings provide adequate, clear, jargon-free information.



There is a sound basis for reviewing instrument proposal postings. Section 27 of the *Environmental Bill of Rights (EBR)* requires ministries to include certain information in Registry postings, such as a description of the proposal and the plans for public participation on the proposal. The 1994-1995 and 1996 ECO annual reports recommended that ministries avoid jargon, provide clear information about the purpose of the proposed decision, the context in which it is being considered, and a contact name and telephone and FAX numbers.

The Ministries of the Environment and Northern Development and Mines, along with the Technical Standards and Safety Authority, all administer instruments that are posted as proposals on the Registry. ECO staff reviewed a sample of instruments from these ministries to arrive at our findings.

Generally, improvements to instrument postings are still required. While many postings do use plain language, more detail or context is often required to ensure that the postings do their job of assisting the public in understanding the proposal. Contact names are still rarely provided. Occasional errors still point to the need for careful proofreading to ensure clarity. Further elaboration is provided below.

Quality of information in the description

For MOE postings, ECO staff reviewed both *Environmental Protection Act* (*EPA*) postings (air and waste disposal sites) and *Ontario Water Resources Act* (*OWRA*) postings. Most of the *OWRA* postings included permits to take water, but ECO staff also looked at several other postings such as orders for preventative measures for facilities discharging into water and unapproved sewage works.

Approximately half of the *EPA* postings contained adequate information written in plain language, consistent with the direction that MOE gives to staff in preparing the postings. The rest of the postings did not contain basic information about the approval being sought and/or were not written in plain language. The *OWRA* post-

ings were usually written in plain language but were often missing required information. For example, several permit to take water postings should have included information on the length of time the permit is being issued for, the purpose of the water taking, and the number of days per year the water will be taken.

MNDM provided a reasonable amount of information in a clear manner. However, the descriptions were missing a proposed timeframe for the implementation of mine closure plans. MNDM has committed to providing this information in the future.

The TSSA provided information in plain language and explained the nature of the variance being requested under the *Gasoline Handling Act*. However, postings were missing context that would help the public understand why the variance was being requested, the timeframe being attached to the variance, and the conditions or pollution control measures that will be put in place if the variance is granted.

Where to view information

The ECO recommends that the Ministry of the Environment revise the *EBR* template for instrument postings. The template currently states "Some Government offices may have copies of this proposal for viewing. These are listed below." Use of the word "may" does not provide certainty to the public that the information will be available.

In the postings reviewed, MOE and MNDM did provide at least one government office where the public may view the information. However, where more than one location is provided, to minimize public inconvenience, the posting should note if all the information is available at both locations. The TSSA did not provide this information in the postings reviewed and should do so in future postings.

Contact Name

In the postings reviewed, the TSSA provided a title but no name for the contact person. MOE usually provided the same. MNDM did provide a contact person in all the postings reviewed.

Recommendation 53

For all postings on the Environmental Registry, ministries should clearly indicate whether or not additional information is available, rather than indicating that information may be available.

Recommendation 54

All ministries posting instruments should ensure that all postings are written in plain language and include:

- **complete information that clearly describes the approval being sought and its potential environmental impacts**
- **the name and title of the contact person**
- **the correct phone and FAX numbers for the contact person.**

Information Notices (*EBR*, section 6)

Section 6(1) of the *EBR* states that the purpose of the Environmental Registry is to provide a means of giving information about the environment to the public. I have encouraged ministries to use this part of the *EBR* to enlarge the scope of environmental information available to the public by posting information notices.

Even when a ministry determines that it can invoke an exception to a Registry posting, or when the environmental significance of a proposed decision appears to be low, the ministry provides an important service when it provides an information posting. An information posting should be clearly identified to avoid confusion with an exception posting or a regular posting for public comment (under *EBR* sections 15, 16 and 22). Ministries should clearly explain why they are using an information posting instead of a regular posting with comment. If the information posting is a proposal, the ECO supports the practice of posting the final decision on the Registry to inform the public of the outcome of a particular issue.

In 1998, information notices for policies, Acts and regulations were provided by four ministries and the Technical Standards and Safety Authority (TSSA) as follows:

Ministry	Number of notices	Comment period provided
MOE	6	4
MNR	11	3
MNDM	1	0
MBS	1	1
TSSA	1	0

The table on pages 224-225 lists all 20 policy, Act and regulation information notices posted in 1998. Although only 40 per cent of the notices included a comment period, information notices with no comment period are still preferable to no notice at all, and in the majority of cases, the ECO agreed with the ministries' use of the information posting provision.

MNR is still posting information notices at several stages of public consultation on forest management plans (43 in 1998). This is a good use of s.6 information notices because it allows a broader public to get involved and stay informed about forestry planning than would otherwise occur.

There were a number of decisions made by various ministries during 1998 that did not require posting on the Registry, but which nevertheless had environmental aspects. It would have been appropriate for these deci-

sions to have been posted as information notices. For example, OMAFRA helped farmers' groups to produce a guideline booklet intended to inform farmers on how to implement environmentally appropriate nutrient management practices. The technical advice provided by OMAFRA did not fall within the posting requirements of the *EBR* (because it was not a "ministry decision"). However, it would have been appropriate to advise the public of this project by posting an information notice on the Registry. In another example, the Ministry of Natural Resources introduced a pilot project to extend the bass fishing season in Lake Erie. Although administered by MNR, this program was governed by a regulation under the federal *Fisheries Act* and thus did not come under the *EBR*. Again, it would have been appropriate for MNR to post an information notice on the Registry to inform the public of this potentially significant decision. MNR has posted similar types of decisions as information postings over the past year, such as implementing daily possession and size limits for rainbow trout in Lake Superior and its tributaries.

The chart on Unposted Decisions (Appendix E) includes a number of cases where an information posting would have been appropriate.

Recommendation 55

Ministries should provide information postings whenever appropriate.

Recommendation 56

Ministries should clearly explain why the ministry is using an information posting.

1998 INFORMATION NOTICES

MOE	Comment Period
Regulation - Hazardous Waste Management Cost Recovery Proposal	30 days
• a proposed cost recovery structure on Ontario's hazardous waste generators to partially recover costs incurred by MOE in managing the province's hazardous waste	
Policy - Approval of Small Used Oil Space Heaters on Hold	69 days
• a hold put on approval of small space heaters that burn used oil until MOE hears from concerned parties regarding the environmental impacts of these heaters	
Policy - Operations Division Policy - Surface Water Transfers	30 days
• a notice to inform the public on MOE's implementation of the surface water transfer policy and provide an opportunity for comments that could alter the policy	
Regulation - Proposed Service Cost Recovery Schedules for Certificates of Approval	18 days
• a revision to the current cost structure for Certificates of Approval to reflect the effort required to process private sector applications relating to air emissions, waste management, and water and sewage works	
Act - Schedules B and D of the *Energy Competition Act, 1998* (Bill 35) - Amendments to the *Ontario Energy Board Act* and the *Environmental Protection Act*	none
• changes to the two Acts will occur as part of the *Energy Competition Act* introduced by the Minister of Energy, Science and Technology (posting AO8E0001)	
Policy - Revised Record of Site Condition Schedule A - Guideline for Use at Contaminated Sites in Ontario, Revised February 1997	none
• administrative revisions to the Record of Site Condition to clarify reporting procedures	
MNR	
Regulation - Boundary Amendment to Silver Falls Provincial Park	none
• deregulation of approximately .85 hectares of land from Silver Falls Provincial Park for a power line	
Regulation - Changes Associated with the new *Fish and Wildlife Conservation Act*, 1997	none
• inform the public that MNR will be preparing regulations associated with the new *Fish and Wildlife Conservation Act, 1997*, and that opportunities to comment on these regulations will be provided on the *EBR* Registry	
Act - *Red Tape Reduction Act* (Ministry of Natural Resources Schedule I) 1998	none
• providing an update to amendments proposed to the ministry's former *Red Tape Reduction Act (1996)*	
Policy - Issuance of a Forest Resource Licence for Recovery of Submerged Wood in Hunters Bay, Town of Huntsville	30 days
• advising the public that a company is proposing to retrieve sunken logs in the Bay and that there are associated *Environmental Assessment Act* requirements	
Policy - Reduction in Walleye Harvest Season in a Portion of Black Bay (Lake Superior) and Three Watercourses Entering Black Bay	30 days
• change the closed season on walleye to re-establish a viable walleye population	
Policy - Minor Amendment to the Rushing River Provincial Park Management Plan for Campground Expansion	none
• an amendment to the Management Plan to change the location of a proposed campground	
Regulation - Lake St. Joseph Fishing Regulation Changes	none
• two new fishing regulation changes to manage the Lake for a high quality fishery (barbless hook requirement and dates for a closed season)	

Policy - Temagami Land Use Plan — none

- advising that the decisions announced on June 28, 1996, have been formalized in an approved plan that is now available

Policy - Daily Possession & Size Limits for Rainbow Trout in Lake Superior and Tributaries — 30 days

- reducing allowed catches of rainbow trout to conserve and improve the rainbow trout population in Lake Superior and its tributaries

Policy - Watershed Action Guide: A Practical Guide for Building Partnerships, Projects and Processes of a Sustainable Watershed — none

- a guide to assist municipalities, citizens and environmental groups to initiate and prepare watershed plans

Policy - Strategic Lands Initiative — none

- a short term program to streamline, refocus and expand MNR's land disposition program

MNDM

Regulation - Notification of a Regulation to Modify the Staking of Mining Claims in Environmentally Sensitive Areas of Ontario — none

- modifying the staking of mining claims in environmentally sensitive areas

MBS

Policy - Government Business Plans - Posting and Accepting Public Comment — 62 days

- seeking public input on ministry business plans for incorporation into next year's business planning process

TSSA

Act - *Technical Standards and Safety Act*, 1998

- a consolidation and harmonization of 7 existing technical safety statutes including the *Gasoline Handling Act* - no changes to substantive technical standards are proposed at this time — none

Financial Statement

Notes to Financial Statement March 31,1998

1. Background

The Environmental Commissioner, which commenced operation May 30, 1994, is an independent officer of the Legislative Assembly of Ontario, and promotes the values, goals and purposes of the *Environmental Bill of Rights, 1993 (EBR)* to improve the quality of Ontario's natural environment. The Office of the Environmental Commissioner monitors and reports on the application of the *EBR*, and participation in the *EBR*, and reviews government accountability for environmental decision making.

2. Significant Accounting Policies

a. Basis of Accounting

The Office uses a modified cash basis of accounting which allows an additional 30 days to pay for expenditures incurred during the period just ended.

b. Capital Assets

Capital assets are charged to expenditure in the year of acquisition.

3. Expenditures

Expenditures are paid out of monies appropriated by the Legislature of the Province of Ontario. Certain administrative services are provided by the Office of the Assembly without charge.

4. Pension Plan

The Office of the Environmental Commissioner provides pension benefits for its permanent employees (and to non-permanent employees who elect to participate) through participation in the Ontario Public Service Pension Plan (PSPF) established by the Province of Ontario.

The Office's contributions to the Fund during the period was $60,520 (1997 - $14,589) for matching contributions and $31,408 (1997 - $0) for unfunded liabilities. The current year's increase is due to the termination of the employer's pension holiday.

5. Lease

During the period, the Office entered into a lease agreement with its landlord for its current premise. The lease payments for the next five years are as follows:

1999	$ 113,421
2000	113,421
2001	113,421
2002	113,421
2003	103,969
	$ 557,653

Office of the
Provincial Auditor
of Ontario

Bureau du
vérificateur provincial
de l'Ontario

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(416) 327-2381 Fax: (416) 327-9862

Auditor's Report

To the Environmental Commissioner

I have audited the statement of expenditure of the Office of the Environmental Commissioner for the year ended March 31, 1998. This financial statement is the responsibility of that Office. My responsibility is to express an opinion on this financial statement based on my audit.

I conducted my audit in accordance with generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statement is free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statement. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, this financial statement presents fairly, in all material respects, the expenditures of the Office of the Environmental Commissioner for the year ended March 31, 1998, in accordance with the accounting policies described in note 2 to the financial statement.

K W Leishman

Toronto, Ontario
June 3, 1998

K.W. Leishman, CA
Assistant Provincial Auditor

Statement of Expenditure
For the Year Ended March 31, 1998

	1998 $	1997 $
Salaries and wages	991,767	978,223
Employee benefits (Note 4)	185,930	108,060
Transportation and communication	42,409	57,312
Services	307,155	346,833
Supplies and equipment	82,251	108,583
	1,609,512	1,599,011

See accompanying notes to financial statement.

Approved:

Environmental Commissioner

Unaudited Statement of Expenditures
for the year ended March 31, 1999

Salaries and wages	$ 1,117,600
Employee benefits	$ 212,300
Transportation and communication	$ 58,400
Services	$ 238,800
Supplies and equipment	$ 64,900
Total	$ 1,692,000

Public Sector Salary Disclosure Act

This statement is provided under the Public Sector Salary Disclosure Act. The following employees of the Environmental Commissioner of Ontario were paid a salary of $100,000 or more during the reporting period.

Employee	Salary	Taxable Benefits
Eva Ligeti	$122,722.76	$351.00

Environmental Commissioner

APPENDIX A
The Environmental Registry

What is it?

The Environmental Registry is an Internet Web site that provides the public with electronic access to environmentally significant proposals and decisions, appeals of instruments, court actions, Statements of Environmental Values, and other information related to ministry environmental decision-making. Ministries have to post this information on the Registry so that the public is able to provide input on proposals before ministries make final decisions on them.

During this reporting period, Ontarians continued to make good use of the Registry, with logons averaging approximately 6,000 a month in 1998.

Upgrade complete

Last year I reported that the Ministry of the Environment (MOE) was planning to upgrade the Environmental Registry by moving the Registry to the Internet early in 1998. I am pleased to report that in April 1998, MOE completed the migration of the Registry to an Internet Web site (www.ene.gov.on.ca/envision/ebr). This transfer to Web technology allows users to customize their searches in many different ways and provides full access to a complete database of all Registry postings. Through hypertext links users may now download the full text for some policies, Acts, and regulations.

Some changes

Last year I recommended that MOE maintain a direct dial-up feature (known as the Lynx text-based service) for people who have a modem but no Internet access. I was pleased that MOE followed this recommendation, which was based on my concerns that when the Registry was moved to an Internet format, access would be decreased for those members of the public who do not have Internet access. I also had concerns that the public library access points for the Registry would be reduced, since at that time Internet access at public libraries was uneven. However, since the inception of upgrades to the Registry, statistics have shown that with one or two exceptions, the Lynx text-based service has not been used.

MOE sought advice from the ECO, suggesting that this form of access to the Registry be discontinued. Considering the expense of maintaining this service, the limitations it imposed on the Registry format, and the fact that most Registry users have Internet access, I agreed that removing the Lynx text-based service would not limit Registry access for Ontarians. In addition, the Ministry of Citizenship Culture and Recreation (MCzCR) has assured me that 58 per cent of our public libraries now have Internet access, and that with the Federal government's help in completing MCzCR's Network 2000 project, all public libraries will have Internet access by April 1999.

MOE and its Environmental Bill of Rights Office have invested the time and resources needed to move the Registry to the Internet and then to maintain it. Their efforts ensure there are no longer any technical barriers to posting proposals in an efficient and timely manner.

Environmental Assessment Homepage

The Environmental Registry continues to be the place Ontarians can look for environmental activities that are planned or under way. The Environmental Assessment (EA) Homepage is also accessed from the Registry Web site. It contains the information related to activities that fall under the *Environmental Assessment Act.* There the public can view the Terms of Reference documents that are submitted to MOE to facilitate public consultation on proposed EA activities, including information on how to comment, time frames for comments, and decisions made.

The Registry continues to provide a cost-effective means by which ministries can solicit public input into environmental decision-making.

APPENDIX B
Educational Initiatives

The educational programs of the ECO enhance the goals of the *Environmental Bill of Rights (EBR)* by helping the public to participate in protecting their environment. Public participation, in turn, helps to ensure that the government of Ontario implements the *EBR* in an effective, timely, open and fair manner. The structured opportunities for participation provided by the *EBR* — including the right to comment on proposals by using the Environmental Registry — also enhance the public's awareness of the complex tradeoffs that are faced when environmental decisions are made. This is particularly so because of the unique requirement of the *EBR* that prescribed Ontario government ministries must explain how they will integrate environmental considerations with social, economic and scientific considerations when they make environmentally significant decisions.

The goal of the ECO's educational programs is a well-informed public, armed with the tools of public participation provided by the *EBR*. A well-informed public can help to ensure that the decisions made by Ontario ministries reflect the environmental values of Ontario residents. And that's one of the major challenges at the ECO. ECO staff often encounter well-intentioned members of the public who are concerned about the environment — but who have yet to learn about Ontario's *Environmental Bill of Rights*. This is not difficult to understand. The ECO has a small staff . . . and is faced with the task of reaching the 10 million residents of Ontario. Nevertheless, each year ECO staff make substantial progress toward that goal.

Accomplishments

Over the past five years, the ECO staff have made hundreds of presentations to large and small groups across the province, including comprehensive community visits to major population centres. They have distributed print, video and other materials through various means, including the Internet. They have talked to Rotary Clubs, municipal councils, community groups, conference participants, and faculty members and students at Ontario high schools, colleges and universities. They have met with business and municipal leaders, Chambers of Commerce, environmental groups, and provincial MPPs and government staff members. As well as education staff, other ECO staff are also part of the in-house Speakers' Bureau available for public presentations. In fact, to date, ECO staff have made educational presentations about the *EBR* to approximately 30,000 people in Ontario.

The ECO has responded to more than 2,000 inquiries per year for publications and information. Staff members have set up displays and distributed educational brochures and made full use of the informational video about the *Environmental Bill of Rights* they produced in 1996. Workshops were held at colleges, universities and public libraries to demonstrate how people can use the Environmental Registry to find information about the environmentally significant proposals and decisions that ministries are making about their own communities.

It is always a challenge to reach all of Ontario's residents. In order to stretch the ECO's staff and resources, the ECO established an Education and Communications Advisory Committee made up of experts from across the province. With their help, ECO education staff developed a resource entitled "Teaching the *EBR*," which is available to teachers throughout Ontario.

Community visits

One of the most successful educational programs is the Commissioner's community visit, which consists of a one-to-three-day swing through a community. In the last four years, these visits have taken place in Thunder Bay, Peterborough, Kenora, Ottawa, Windsor and London, along with several other centres. During these visits the Commissioner and her staff hold information sessions about the *EBR* and talk to residents about how they can use their *EBR* rights to address particular environmental issues in their communities. This interaction with the residents of Ontario has been among the most rewarding of the Commissioner's work. In the visits, the ECO has heard about each community's own environmental concerns. The ECO has also discovered that people are eager to learn how the *EBR* can help them tackle local as well as provincial environmental problems. Coverage of the ECO's visits by the local media has made the task of reaching everyone that much easier.

During 1998, we visited London, where we met with the London Chamber of Commerce, City Council, the city's Advisory Committee on the Environment, as well as with students and faculty at the University of Western Ontario and Fanshawe College.

Resource Centre

The ECO's Resource Centre is open to the public and is home to a growing collection of environmental resource materials, focusing primarily on environmental law and policy. During the past five years, the Resource Centre has acquired many new reference works, ranging from landfill engineering to the principles of environmental economics and hazardous waste incineration. The collection includes Ontario government publications, federal

government reports, environmental management literature, publications of non-governmental organizations, and a range of environmental periodicals. The ECO's library assistant answers questions, directs visitors to the material they're looking for, and helps with the use of our on-site computer terminal that allows people access to the Environmental Registry.

The Resource Centre is well stocked with educational materials that focus on Ontario environmental law and policy and the national and international context in which Ontario environmental policy is formed.

Spreading the word

Each year, staff distribute ECO publications, more than 17,000 in 1998. These publications included annual reports and copies of ECONOTES — 32 different fact sheets on topics that range from the interaction between the *EBR* and environmental assessments to information on how Ontario residents can pursue specific rights under the *EBR*. Public inquiries to the ECO office during 1998 passed the 900 mark.

During 1998, the ECO newsletter, *EBR*ights, the mainstay of our updates to the public, has been completely redesigned to make it easier for readers to stay current with the latest issues surrounding the use of the *EBR*. More than 5,000 people in Ontario now receive the *EBR*ights newsletter, which carries updates on the public's use of the *EBR*, reviews of new books in the Resource Centre, and information about ECO publications and about new initiatives taken on by staff members. Each issue of the newsletter contains the "Commissioner's Message," where the Commissioner sums up her thoughts on how ministries are complying with the *EBR* and shares her views on how the mandate of the Environmental Commissioner of Ontario and the implementation of the *EBR* can best be fulfilled.

Internet Homepage

The ECO's Internet Homepage is the most recent addition to the ECO's educational activities. On it one will find many of the ECO's educational publications, as well as copies of the annual reports. In the near future, access to the ECO Resource Centre's on-line catalogue and to the entire ECONOTE collection will also be available on the Homepage. On average, the ECO Homepage received about 1,000 "hits" per month in 1998. The Homepage has had visitors from countries as far away as Australia, New Zealand, Japan, Korea, Nepal, Argentina, Brazil, Israel, India, and Bangladesh, as well as visits from almost all of the countries of Europe.

The ECO education staff are currently working on plans to place a downloadable, introductory slide presentation on the *EBR* on our Web site and are also looking at new ways in which staff can use both e-mail and the Internet to advance the educational goals of the *EBR*.

Guidance documents

The ECO has also developed two guidance documents for ministry staff in response to discussions with them about provisions of the *EBR* that relate to the use of the Environmental Registry. The documents clarify how the Commissioner assesses and evaluates ministry activities with regard to the *EBR*'s Registry notice and comment procedures.

Future challenges for the ECO education program

In view of the limitations that come with finite staff and financial resources, a key ongoing challenge for the ECO's public education program is targeting the audience. Education staff have asked the right questions: who wants to know, who needs to know, and who should know about the *EBR*? To find the answers, they have analysed incoming requests from the public, including which sectors of the Ontario public are making use of the Homepage, who wants to be added to our mailing lists, who is requesting documents, and who is using the Resource Centre and calling us on our public information lines. Based on this data, the ECO's education programs are being targeted to those groups and individuals who have expressed the greatest interest.

Another ongoing challenge of the ECO's education program is the need to reconcile the complexity of environmental decision-making with the public's need for transparency and accountability. Consequently, the ECO strives to create reader-friendly materials, to avoid the use of technical jargon, and to explain technical terms in plain language. Choosing the best medium for a particular audience is also an ongoing consideration which must be decided on a case-by-case basis. Thus far, the primary media for the ECO's education initiatives have been printed material, along with the Internet and personal contacts.

As a measure of the effectiveness of all these initiatives, the demand for the ECO's educational services has grown each year, continuing to outpace available resources. As well, public recognition of the *EBR* has grown significantly since February 1994. Nevertheless, there is still a long way to go in raising the level of public awareness of the *EBR*. The ECO's commitment to its public education program is aimed at raising that awareness.

APPENDIX C
New Laws and Regulations

Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA)

Bill 146, *Farming and Food Production Protection Act, 1998* (AC7E0001)

Proposal posted 28-Jan-97

Decision posted 02-July-98

- Provides broader protection to farmers against complaints from neighbours than the *Farm Practices Protection Act* (*FPPA*) *(1988)*, which it replaces.
- Expands list of nuisances that farmers are permitted to cause as a result of normal farm practices from noise, odour, and dust, to include: flies, smoke, vibration, light.
- Prohibits municipal by-laws from restricting a normal farm practice.
- If a farm practice is determined to be a "normal" practice by the Normal Farm Practices Protection Board, neighbours cannot succeed in stopping the practice through a court order.

Environmental Implications & Public Participation

- Under the new *FFPPA*, as under the old *FPPA*, environmental protection legislation is still paramount; "normal" farm practices are not protected practices if they contravene environmental regulations, permits, or statutory provisions.
- The Normal Farm Practices Protection Board must first decide that a practice is not "normal" before a complainant can sue in court for harm to a public resource or public nuisance (under the *EBR*) or for nuisance under common law.
- The new *FFPPA* expands the restrictions on court actions for public nuisance and harm to a public resource under the *EBR*.

ECO Commentary

- A discussion paper posted on the Registry in January 1997 proposed changes to the Act; public consultation on the proposal led to Bill 146.
- Public comments on the Bill can be generally summarized as follows: farmers applaud the greater protection it offers them, saying this Act is not about pollution but about nuisance lawsuits; municipalities and environmental groups are concerned about the restriction on by-laws contained in the Bill, and some said it is "undemocratic." In addition, many groups and individuals expressed concern that MOE is not enforcing environmental protection legislation when it comes to pollution from farms.

Ministry of Consumer and Commercial Relations (MCCR)

Standard adopted under the *Gasoline Handling Act*: Forest Management Activities (RL7E0001)

Proposal posted 3-Jan-97

Decision posted 29-April-98

- Prescribes standards for the handling of gasoline in the forest industry, including provisions for the use of mobile refueling equipment.

Environmental Implications & Public Participation

- The standards introduce a minimum level of care in the handling of gasoline in order to prevent spills and other accidents which may have adverse impacts upon the environment.

ECO Commentary

- The standards came into force in October 1997, but a decision notice was not posted until April 1998. The Technical Standards and Safety Authority (TSSA) has indicated that the delay occurred due to difficulties they experienced with MOE over access to the Registry.

Proposed Fuel Oil Regulation and Fuel Oil Code, made under the *Energy Act* (RL7E0002)

Proposal posted 31-Jan-97

Decision not posted in 1998 (not a mandatory posting)

- Provides new standards for underground petroleum tanks.
- New tanks will have to be built to higher standards (including double walls) and large existing single-wall tanks will have to be replaced with double-wall tanks.

Environmental Implications & Public Participation

- Leaking underground storage tanks pose a potential serious environmental problem. One author has referred to them as "toxic time bombs," stating that "a tiny gasoline leak of just one to two drops per second can contaminate more than 454 million litres of groundwater in a month." Double-walled tanks are less prone to leaking and provide a method of detecting leaks at an early stage.
- MCCR's use of the Registry to provide notice of this proposal facilitated public comment on this important regulation; MCCR was not required to post the Fuel Oil Regulation for public comment because the *Energy Act* is not prescribed under the *EBR*.

ECO Commentary

- The regulation is still under revision; the ECO will review this decision when posted.

O. Reg. 156/97 - Certification of Petroleum Equipment Mechanics, made under the *Gasoline Handling Act* (RL7E0003)

Proposal posted 7-April-97

Decision posted 29-April-98

- The regulation creates a certification system for petroleum equipment mechanics; operators of licensed service stations and marinas will be required to have equipment installed, serviced, and maintained by certified persons.

Environmental Implications & Public Participation

- Certification will ensure minimum standards of knowledge among operators and maintainers of petroleum equipment in retail facilities, which could reduce leaks and accidents. Such events can cause serious environmental harm and create a risk to the public.

ECO Commentary

- The regulation came in force in July 1997, but no decision notice was posted in 1997. A decision notice was finally posted April 29/98.
- The regulation was filed May 2, 1997, five days before the 30-day comment period had ended.

Proposed Regulatory Bulletin: Petroleum Contamination, made under the *Gasoline Handling Code*, part of the *Gasoline Handling Act* (RL8E0001)

Proposal posted 13-Jan-98

Decision not posted in 1998

- The proposal is intended to amend the Gasoline Handling Code so that it is consistent with the *Environmental Protection Act* (*EPA*) and MOE's guidelines, such as the Guideline for Use at Contaminated Sites.

Environmental Implications & Public Participation

- The *Gasoline Handling Act* (*GHA*) ensures that when spills and leaks of fuels occur, action is taken to mitigate and clean up the damage caused by the spill.
- Consistency between the *EPA* and the *GHA* will make regulatory compliance easier.

ECO Commentary

- The TSSA has undertaken consultation with various stakeholders on this proposed change, including the Canadian Petroleum Products Institute.
- Consultation with industry is still occurring on this proposed regulation.
- The ECO will review this decision when posted.

Proposed *Technical Standards and Safety Act, 1998* (AJ8E0001)

Joint posting by MCCR and the Technical Standards and Safety Authority (TSSA)

Proposal posted 21-Oct-98

Decision not posted in 1998

- The draft legislation has not yet been introduced in the Legislative Assembly for First Reading.
- The purpose of this proposed Act is to implement a single streamlined statutory scheme for the administration of seven existing technical safety statutes, including the *Gasoline Handling Act (GHA)*. This scheme will be administered by the TSSA as provided for under the *Safety and Consumer Statutes Administration Act, 1996*. (For additional background, see the ECO 1996 annual report, pg. 22)
- The proposed Act retains the essential characteristics of the existing licensing schemes. The Act addresses: appointment of inspectors; approvals; issuing safety orders; appeals of approval refusals and safety orders; inspection powers and search procedures; regulation-making powers of the minister and the Lieutenant Governor.
- Seven Acts will be repealed and the technical details contained in those Acts effected through regulations. MCCR indicates that no changes to substantive technical standards are proposed at this time.

Environmental Implications & Public Participation

- The *GHA* is a prescribed Act under the *EBR*.
- Section 40 of the proposed Act states that the *EBR* will continue to apply with respect to matters to which the *GHA* would have applied.
- The current classification regulation for the *GHA* designates variances as Class I instruments that must be posted on the Environmental Registry. The TSSA has indicated that variances under the new regulation will continue to be posted.

ECO Commentary

- In the spring of 1998 the TSSA began consultations with stakeholders on this reform package. When the ECO learned of these consultations in the summer of 1998, ECO staff sent a letter to the TSSA urging the ministry post a proposal for the new legislation on the Registry.
- TSSA later extended the comment period from 30 days to 45 days to provide a greater opportunity for public comment.
- MCCR has facilitated public participation in the development of this legislation by posting this proposal on the Registry before the legislation was formally tabled in the Legislature and has undertaken consultations with concerned stakeholders in advance of tabling the legislation.
- The ECO will review this decision when posted.

Ministry of Energy, Science and Technology (MEST)

Bill 35, *Energy Competition Act, 1998* (A08E0001)

Proposal posted 11-Jun-98

Decision not posted in 1998 (comment period originally ended 10-Aug-98 but was extended until 20-Aug-98 to coincide with legislative hearings))

Third Reading 29-Oct-98

The proposed Act contains four schedules:

Schedule A - contains the *Electricity Act, 1998*, replacing the *Power Corporation Act*. It establishes the commercial successors to Ontario Hydro (OH) and the Independent Market Operator. The Act also creates a financial holding company to manage OH's existing debt.

Schedule B - covers the *Ontario Energy Board Act, 1998*, replacing the current *Ontario Energy Board Act*. The Board's responsibilities in existing areas are continued (regulation of natural gas distributors, transmitters and storage companies; persons constructing and maintaining hydrocarbon pipelines; and affected landowners). The Board is also given new powers to regulate the electricity sector.

Schedule C - includes amendments to the *Ontario Municipal Employees Retirement System Act* (unlikely to be environmentally significant).

Schedule D - contains consequential amendments to and repeals of other pieces of legislation, including the *Public Utilities Act*, the *Conservation Authorities Act*, the *Environmental Protection Act* and the *Municipal Franchises Act*.

The posting states that the proposed Act contains provisions to reform municipal electrical utilities, ensure a smooth transition to competition in Ontario's electricity sector, provide for payments in lieu of taxes and transition charges, and ensure that electricity system participants carry out their emergency planning responsibilities.

The new *Electricity Act* also creates several new corporations, including Ontario Power Generation Incorporated (OPGI) and Ontario Hydro Services Company (OHSC). OPGI will own and operate Ontario Hydro's electricity generation facilities, while OHSC will own and operate transmission and distribution systems.

Environmental Implications & Public Participation

As of Dec 31, 1998, MEST has not decided whether the *Electricity Act, 1998* and the revised *Ontario Energy Board Act (OEBA)* will be prescribed under the *EBR*. Thus, it is unclear that the public will be able to comment on Registry proposals for environmentally significant regulations to be promulgated under this new law.

Cabinet is provided with new powers to make regulations under the *OEBA* in the following areas:

a) requiring retailers to residential or small business consumers to obtain electricity retailing licences;

b) requiring retailers to make timely disclosure to MOE of contaminants emitted by electricity generation facilities, the nature of the fuels burned, and the process of generation used at the facilities;

c) authorizing MOE to determine whether claims made about contaminant emissions are accurate;

d) requiring retailers to file reports on emissions with the Ontario Energy Board; and

e) establishing the rules for emissions trading.

- MEST claims that Bill 35 gives Cabinet the power to ensure that coal-burning plants in the United States producing cheap, dirty electricity cannot compete unfairly with Ontario electricity companies by requiring these companies to disclose to consumers and regulators how much pollution is caused by the electricity they generate and sell. In August 1998, MOE stated in legislative hearings on Bill 35 that these types of generators won't be able to get a licence to sell electricity in the province if they don't meet Ontario's environmental standards.
- At present, Ontario Hydro is subject to an emission cap for sulphur dioxide and nitrogen oxide and has a voluntary limit on annual carbon dioxide emissions. These limits would not apply to private generators as the regulation is currently construed.

ECO Commentary

Originally posted for 60 days. The comment period was later extended another 10 days to allow for additional public input.

ECO review of the public participation and consultation programs conducted on restructuring in the electricity sector between late 1995 and late 1998 suggests that these were exemplary. Staff and decision-makers at MEST and the Energy staff in the former MOEE (which guided consultations between late 1995 and October 1997) have made a strong effort to consult with a wide range of stakeholders. By voluntarily posting notices of their consultation processes, MOE and MEST ensured that adequate time was provided for public comment on the proposed legislation. Multiple opportunities were provided to comment on options for restructuring of the electricity industry.

There are significant gaps and overlaps in the current approvals system for certain types of technologies and different forms of companies. For many years, Ontario Hydro, a large public corporation, was required under the *EAA* to carry out individual environmental assessment studies for new generation facilities and for most transmission lines longer than 50 kilometres. Moreover, some of these projects were subject to EA hearings, particularly when serious public concerns about the projects were raised. It is possible that this will no longer be the case for OHSC, OPGI and its private sector competitors. While individual projects could be designated for environmental study under the *EAA*, past experience suggests that decision-making on *EAA* designations is inconsistent, and many important projects might escape careful EA review if designations remain the primary vehicle for environmental planning. MOE is consulting on how to address these environmental planning issues.

Ministry of the Environment (MOE)

Bill 82, *Environmental Statute Law Amendment Act* (AA8E0002)

Proposal posted 24-Nov-98

Decision posted 24-Dec-98

The objective is to strengthen the enforcement provisions of Ontario's environmental protection legislation.

The Act amends certain investigation and enforcement provisions of the *EPA, OWRA*, and *Pesticides Act*.

- Bill 82 empowers MOE to:

(a) seize licence plates and permits from vehicles used to commit environmental offences;

(b) apply new administrative monetary penalties to enforce compliance with environmental laws and regulations;

(c) secure areas and facilities to ensure evidence is protected;

(d) extend provisions for control of illegal dumping and cleanup to people who broker illegal waste disposal;

(e) streamline the process by which environmental officers issue compliance orders in the field; and

(f) use more modern investigative aids, equipment and techniques.

Environmental Implications & Public Participation

- MOE intends to develop regulations setting out criteria and specifying the types of contraventions to which MOE Directors can apply administrative penalties.
- Some commentators on Bill 82 have pointed out that while the new law provides MOE enforcement officers with the tools necessary to ensure that polluters are caught and punished, it is questionable whether MOE has sufficient staff and resources to use these new provisions.

  Concern also has been expressed about the provisions in Bill 82 for administrative monetary penalties. The maximum penalty which can be imposed is $5,000 for each day on which the contravention occurs or continues. In contrast, the LSB of MOE, under the A.G., can seek fines of up to $100,000 per day from a court under existing provisions in the *EPA* if they are able to prosecute a company and also can seek imprisonment. Some commentators argue that the low ceiling of $5,000 for contraventions of environmental laws will be perceived by many companies as "a license to pollute".

ECO Commentary

MOE provided only 10 days for the public to comment on this proposal.

One day after it was posted for the shortened comment period, the ECO wrote to MOE and urged the ministry to comply with the minimum posting period of 30 days. MOE responded by stating that "Bill 82 was before the Legislature for its consideration and, as part of the legislative process, elected members had the opportunity to express their views and provide input on the Bill." MOE also stated that the period for posting was reasonable to ensure that public comments would be received and therefore could be considered during the Legislative session which ended December 17, 1998.

In this case, the proposed shortened comment period did not comply with the 30-day requirement in section 15 of the *EBR*.

In addition, it was seriously inadequate when evaluated in terms of the ECO's Guidance Document on Environmental Registry Notice and Comment Procedures, dated August 1996. This guidance document recommends that ministries post a notice of a proposal related to policy development work on complex proposals such as this at the earliest reasonable time.

Deadlines regulation made under the *Environmental Assessment Act* (*EAA*) (RA7E0010)

Proposal posted 22-Jul-97

Decision not posted in 1998

Regulation Filed 27-Nov-98

Came into Effect 31-Dec-98

- This regulation sets out prescribed deadlines for the completion of key steps in the EA process, including: approval of the terms of reference (TOR), government's technical review, public agency review, public comment period, and final decision on the approval.
- The stated purpose of this regulation is to provide time savings, reduce costs, and provide certainty in the EA process. The goal is to reduce the time needed to obtain an EA approval from an average of two years to one.
- This regulation was passed under amendments to the *EAA* made by the *Environmental Assessment and Consultation Improvement Act, 1996*. For background on this Act, see ECO annual report 1996, p. 23.

Environmental Implications & Public Participation

- Although this regulation does not affect the substantive aspects of the *EAA*, it does have important procedural implications. The public will be required to submit their comments to MOE on a proposed EA study within 7 weeks of the notice of submission being posted on the MOE's Environmental Assessment homepage (which may be accessed from a link provided on the Registry Web site).
- Final comments on the government review must be submitted within 5 weeks of notice being given.
- The five-week comment period for proposed TORs is an improvement in comparison with the original 1996 proposal, which indicated that the public would be provided only 14 days to review and comment on proposed TORs.
- MOE has indicated that the proposed TORs will be available on MOE's EA homepage, with 30 days for public comment. However, this is not a stipulated requirement under either the Act or the regulation.

ECO Commentary

- A decision notice was not posted on this proposal in 1998 despite the regulation being filed on November 27, 1998. MOE intends to post the decision notice once explanatory information on the regulation is ready to distribute.
- In those cases where the scope of the proposed undertaking is significant and complex, it will be difficult for members of the public to respond to proposed TOR documents within such a short timeframe.
- Some commenters thought that some deadlines contained in the regulation were unrealistic and that there should be a public process set out to extend the deadlines as necessary.

O. Reg. 232/98 - Regulatory Standards for New Landfill Sites Accepting Non-Hazardous Waste (RA6E0006)

Proposal posted 17-Jun-96

Decision posted 3-Jul-98

- The standards are intended to codify current MOE approval requirements for most landfills in order to provide a more certain and rational process of waste management planning.
- There are design standards for site assessment and design, and operation and monitoring.
- The proposed standards also require that the landfill owner form a public liaison committee and host meetings regularly during the year, a requirement that codifies provisions often found in most Cs of A for waste sites. The invitation to participate on the public liaison committee is to be extended to nearby residents, and representatives of the local and upper tier municipalities.

Environmental Implications & Public Participation

- These standards are important because large landfills produce air and water pollutants that can potentially affect surrounding land, groundwater and surface waters. These pollutants can be released for several hundred years and be transported long distances after the landfill ceases to receive waste.
- In their comments, many stakeholders recommended that some of the detailed provisions be written as guidelines in order to provide the flexibility to consider site-specific conditions. Additional flexibility is reflected in the final standards dealing with matters such as: hydrogeologic and surface water assessments of sites; the design details to be provided for the groundwater protection system and for surface water control; record keeping; and the monitoring program. MOE also indicates that issues which are addressed by the guidelines will be made enforceable through the certificate of approval required for each landfill. Thus, the landfill standards were finalized as a combination of regulatory requirements and approval guidelines.

ECO Commentary

- MOE received 99 comments on this proposal.
- Several large environmental groups stated they were concerned that MOE would use the proposed standards as a justification for not holding a public hearing.
- Since 1994, the ECO has received more than a dozen applications for investigation and a handful of applications for review related to landfill operations and approvals. In addition, other *EBR* rights, such as the right to seek leave to appeal and the right to comment on proposals, are often exercised by residents concerned about landfills.

  Some stakeholders expressed serious reservations about the proposed standards, and these were not reflected in the summary of comments in the Registry decision notice.

  It took nearly two years for MOE to finalize these standards.

O. Reg. 128/98 - Amendments to Regulation 347 (Waste Management), made under the *Environmental Protection Act (EPA)* (RA7E0012)

Proposal posted 22-Oct-97

Decision posted 23-Jul-98

This regulation clarifies the definition of waste by amending the list of designated wastes to include residues leaving an industrial, manufacturing or commercial process or operation.

Several wastes are exempted from certificate of approval requirements, including: solid photographic waste that contains silver (when it is being transferred to a site where silver is recovered); chop line residues transferred by a generator to a site to be processed for recovery of metal and plastic (chop line residue is residue remaining after metal is recovered from wire and cable, and it contains polyvinyl chloride, lead and cadmium); spent pickle liquor (where it will be used as a treatment chemical in a sewage or wastewater treatment plant); and chipped wood intended for use as mulch or landscaping material.

Environmental Implications & Public Participation

The expanded definition of waste ensures that MOE is able to regulate wastes and recyclable materials.

The exemptions proposed in the regulation reduce regulatory control of various substances which appear to be hazardous waste.

The exemptions created by the regulation will result in fewer instruments under Part V of the *EPA* being posted on the Registry for notice and comment, or being subject to review and investigation under the *EBR*.

ECO Commentary

This was a complex proposal. The ministry received 17 written submissions.

A number of industries and industry associations are opposed to the proposal to designate residues as waste, maintaining that the proposed designation would include materials that in the past have not been considered waste.

Other companies supported the addition of one or more of the proposed lists of wastes that, if recycled as described, would be exempt from waste approvals. Some requested that the exemptions be broadened even further to include other materials.

Submissions from environmental groups supported the proposal to designate residues as waste. None supported the exemptions provided to some waste products. They suggested that the proposed exemptions would result in the storage and processing of these materials going unregulated. They maintained that recyclable materials, especially those that are hazardous, should not be exempt from waste approvals and administrative requirements.

Regulatory Amendments re: Implementation of Provisions of the *Services Improvement Act*, made under the *Ontario Water Resources Act* and the *Environmental Protection Act* (RA8E0013)

Proposal posted 23-Feb-98

Decision posted 22-May-98

O. Reg. 154/98, O. Reg. 155/98, O. Reg. 156/98 and O. Reg. 157/98 set out transitional provisions and enact regulatory amendments in order to implement the *Services Improvement Act,* passed in 1997, which amended the *EPA*, the *OWRA* and the *Building Code Act*.

The *Services Improvement Act* transferred responsibility for granting approvals and enforcing standards for septic systems from MOE to MMAH and municipalities, and deemed hauled sewage to be "waste" under Part V of the *EPA*. Large septic systems (greater than 10,000 litres/day) that were previously governed by both the *EPA* and the *OWRA* continue to be governed by the *OWRA* alone.

Environmental Implications & Public Participation

- These four regulations sort out some of the regulatory details arising from the changes brought by the *Services Improvement Act*. They are incidental to the statutory amendments and do not introduce significant new principles or standards.

No additional impact on the environment is anticipated beyond the changes brought about in 1997 by the passage of the *Services Improvement Act*.

The *Services Improvement Act* was described in the 1997 ECO annual report, p. 24.

ECO Commentary

The ministry did not receive any comments on this proposal.

O. Reg. 50/98 - Amendments to Effluent Monitoring Limits in O.Reg. 63/95, Municipal Industrial Strategy for Abatement (MISA) Organic Manufacturing Sector - Regulation (RA7E0013)

Proposal posted 24-Dec-97

Decision posted 17-Feb-98

This regulation increases the amount of chemicals that may be discharged into receiving waterways for several chemical and rubber/vinyl manufacturing companies on a facility-specific basis. Companies include Bayer Rubber Inc., Dow Chemical, Ethyl Canada Inc., G.E. Plastics, Geon Canada Inc., Imperial Oil Chemicals, Nova Chemicals, and Cornwall Chemicals.

The amendments increase loading limits for conventional substance parameters such as nitrogen compounds, suspended solids and dissolved organic carbon. MOE says that these changes were made to reflect an increase in production at the different companies. The original limits were based on 1989/90 production levels and were established in the middle of a recession. The new limits are meant to reflect the performance of a well-operated treatment system.

Environmental Implications & Public Participation

MOE states that the implementation of the amendments will not adversely affect the environment. Legal requirements to ensure that effluent is non-toxic remain, and the companies will still be required to have their effluent pass toxicity tests.

ECO Commentary

MOE's decision appears to contradict its Statement of Environmental Values under the *EBR*, especially the principles of pollution prevention and minimizing the creation of pollutants that can damage the environment.

MOE received 5 comments, some from the affected companies, requesting increases to some of the loadings or supporting the amendments. In most cases MOE agreed to increase the loading limits as requested.

Media reports noted that "the government's actions seem to indicate that the province is willing to alter discharge limits for businesses to raise their output."

MOE also received comments from an environmental group after the comment period expired, which were not considered. The group opposed certain aspects of the amendments, indicating that they would increase discharges of pollutants to the environment.

Declaration request under the *Environmental Assessment Act* (*EAA*) for the Association of Conservation Authorities of Ontario (RA8E0015)

Proposal posted 12-Mar-98

Decision posted 06-Jul-98

This regulation declares that activities carried out by members of the Association of Conservation Authorities of Ontario (now Conservation Ontario) are not subject to the requirements of the *EAA*.

The exemption applies to activities that were previously covered under the Class EA for Remedial Flood and Erosion Control Projects which expired in February 1998.

Allows these activities to continue for a further two-year period until the Association receives approval for a new Class EA.

Environmental Implications & Public Participation

According to the Conservation Authorities, unless the activities were granted an exemption from s. 5 of the *EAA*, the following damage would occur:

(a) Conservation authorities would have been subject to delay and expense if required to prepare individual environmental assessments for remedial flood and erosion control projects.

(b) Stakeholders who are presently protected from personal harm or financial loss by the remedial erosion and flood control projects performed by the conservation authorities could risk personal injury and property damage resulting from flooding and erosion that could have been addressed in a more timely manner using the Class EA procedures.

ECO Commentary

- The ministry did not receive any comments on this proposal.
- Conservation Ontario indicated that it was making the request "to ensure that the Conservation Authorities can continue to undertake remedial projects aimed at reducing the risk to life and property from flooding and erosion hazards which were formerly governed by this Class EA and allow these activities to proceed under the rules that applied under the Class EA."

O. Reg. 153/98 - Designation by Regulation made under the *Environmental Assessment Act* (*EAA*) of a proposal by KMS Peel Inc. to expand the Energy-From-Waste (EFW) facility located in Brampton (RA7E0011)

Proposal posted 22-Oct-97

Decision posted 26-May-98

Requirement that an EA study be prepared for the expansion of the privately operated EFW facility run by KMS Peel Inc. The expansion would add a fifth incinerator and boiler, modify the air-cooled condenser, and modify the air pollution control system.

Environmental Implications & Public Participation

The designation will result in the proposal undergoing an EA which includes mandatory public consultation requirements.

The minister may decide to require a public hearing or a scoped public hearing under the *EAA*. However, as a result of O. Reg. 207/97, made under the *EPA*, designated waste disposal facilities, including incineration sites, are exempted from a hearing under Part V of the *EPA* if they have been designated under the *EAA*.

The Registry proposal notice indicated that KMS Peel Inc. requested that the facility expansion be designated under the *EAA*.

ECO Commentary

Comments were received from three groups (Ontario Health Advocacy Association, Greenpeace and Great Lakes United) which supported the proposal.

The minister did not appear to have considered the comments that a participant funding regime be included to allow the public to take a more active and effective role in the assessment process.

Exemption by Regulation from *Environmental Protection Act (EPA)* Part V Hearing, Deloro Mine Site Rehabilitation (RA8E0029)

Proposal posted 19-Aug-98

Decision posted 25-Nov-98

This regulation exempts the establishment of a waste site at the Deloro abandoned mine site from the requirement for a hearing under Part V of the *EPA*.

The Deloro mine site is an abandoned mine site located on the Moira River in Hastings County, approximately 45 km north of Belleville. The mining and refining activities that occurred at the site left serious environmental problems, including large amounts of refining waste, mine tailings, and pesticides and wastes containing arsenic.

The waste disposal site would be established on-site at the mine to manage hazardous waste generated by the site cleanup.

Environmental Implications & Public Participation

The objective of this regulation is to proceed with the site cleanup and closure in an expeditious manner by exempting the containment of hazardous waste on the site from the requirement for a mandatory hearing.

The regulation removes only the requirement for a mandatory hearing under Part V of the *EPA*, not the requirement to obtain approval for on-site containment under Part V of the *EPA*.

ECO Commentary

In April 1997, MOE announced in a press release that it would clean up the Deloro Mine Site. The ECO sent a letter to MOE asking why this matter had not been posted on the Registry. In response to this letter, MOE indicated that it would post notice of any proposals to issue the necessary certificates of approval on the Registry (for further background, see ECO's 1997 annual report, p. 29).

A public liaison committee has been established to keep local groups and the public informed about the cleanup process.

Proposed Amendments to Effluent Monitoring Limits in O. Reg. 525/95, Municipal Industrial Strategy for Abatement (MISA) Electric Power Generation Sector Regulation (RA8E0034)

Proposal posted 27-Nov-98

Decision not posted in 1998

MOE states that the purpose of the proposal is to amend the in-plant non-toxic effluent requirements under MISA for chlorine in the Electric Power Generation Sector. MOE also claims that this is not a decrease in environmental protection since the plant's final effluent entering Ontario's waterways must still meet all MISA effluent discharge requirements for non-toxic discharges in the Cs of A.

The chlorine is used to control "bio-fouling" related to zebra mussel control.

The amendment requires Hydro to prepare and submit a toxicity elimination report to the Director, within one year of the proposed amendment, outlining how it will reduce its "in-plant effluent stream(s)" that are toxic due to chlorination.

The toxicity elimination report shall set out a detailed description of the methods to be used to eliminate the toxicity caused by chlorine. Hydro shall also submit annual toxicity elimination progress reports, including milestone dates, and set out the date by which chlorine toxicity will be eliminated.

Environmental Implications & Public Participation

The MISA regulation which is being amended requires that process effluents and building effluents be non-toxic to rainbow trout and *Daphnia Magna* (a water flea). The non-toxic requirement and effluent limits have been in force since April 12, 1998.

According to MOE, an analysis carried out by Ontario Hydro of its nuclear generating stations indicated that 22 out of 59 building effluent streams are toxic due to the presence of chlorine during the zebra mussel control season (time period when intake water temperatures are above 12 degrees Celsius). This regulation would allow this adverse effect to continue.

MOE says that the issue of toxicity due to chlorine was not included in the program approvals since there is no achievable technology to replace chlorination in a timeframe suitable for the program approvals.

ECO Commentary

The ministry approved programs submitted by Ontario Hydro that extended the time for the nuclear generating stations to implement measures to meet the regulatory requirements that came into effect in April of 1998. All program approvals were posted on the *EBR* Registry on May 19, 1998, for a 30-day comment period.

The ECO will review this decision when posted.

See p. 192 for details about program approvals.

Proposed Regulation made under the *Ontario Water Resources Act:* Water Taking and Transfers (RA8E0037)

Proposal posted 18-Dec-98

Decision not posted in 1998

MOE states that the purpose of the proposal is to provide for the conservation and management of Ontario's surface water resources by prohibiting the transfer of surface water out of defined Ontario water basins.

For the purposes of inter-basin water transfers, Ontario is divided into three water basins: the Great Lakes-St. Lawrence Basin, which includes the Ottawa River and the part of Ontario that drains into it; the part of Ontario which drains into the Nelson River; and the part of Ontario which drains into Hudson Bay or James Bay.

Water used to manufacture a product which is then transferred out of the basin, or potable water that is bottled in containers less than 20 litres in volume, is exempted from the prohibition.

With regard to applications under S. 34 of the *Ontario Water Resources Act* (*OWRA)* for permits to take surface water, the regulation requires government decision-makers to consider prescribed factors as set out in the regulation and also to notify and consult with other jurisdictions which have a joint interest in a water taking prior to the decision being made.

Environmental Implications & Public Participation

The restriction on transfers does not apply to an undertaking that commenced prior to January 1, 1998, provided that the annual transfer does not exceed the greatest amount transferred in a previous calendar year prior to January 1, 1998.

- Section 34 of the *OWRA* is a prescribed instrument under O. Reg. 681/94. Most proposals to issue such permits must be posted on the Environmental Registry for at least 30 days in order to provide the public an opportunity to comment on the proposal.

The factors that must be considered before granting a Permit to take Water (PTTW) under section 34 of the OWRA include:

- protection of ecosystems
- private domestic uses
- agricultural uses

municipal and sewage uses

effects on groundwater

other current and future uses

the public interest

other relevant matters.

ECO Commentary

The issue of water transfers between water basins was previously addressed in May 1998, when MOE issued a policy entitled "Surface Water Transfers Policy" (Operations Division, MOE). The policy "sets out the process to be followed by Ministry staff and relevant concerns to be considered for reviewing permits to take or transfer surface water." (See Registry Posting #PA8E0027).

The policy was issued in response to a PTTW granted to the Nova Group Limited to export Lake Superior water to Asia by tanker. The permit was later revoked on the basis of the water transfers policy. Nova Group appealed the revocation of the permit, but later withdrew its appeal after signing a Memorandum of Understanding with MOE (see the discussion of instruments on p. 190.)

This proposal appears to have incorporated some of the comments received on the Surface Water Transfers Policy in relation to the need for specific criteria and the need for Ontario to be divided into more than 2 basins.

The ECO will review this decision when posted.

Ministry of Municipal Affairs and Housing (MMAH)

Bill 98, *Development Charges Act, 1997* (AF7E0002)

Proposal posted 3-Feb-97

Decision posted 8-May-98

Limits the municipal services for which development charges can be levied.

Requires municipalities to contribute 10% of cost of "soft services" financed with development charges (including libraries, community centres, and transit)

Requires preparation of a background study before municipalities can make development charges by-laws.

Environmental Implications & Public Participation

The amendments reduce the ability of municipalities to offset the cost of infrastructure and services through development charges. Municipalities can no longer impose development charges to pay for any of the following environmentally related activities: the acquisition of environmentally sensitive areas, the acquisition of woodlots, the creation of parkland, and capital costs for waste management facilities.

This Bill pitted municipalities against developers. Developers argue that these types of activities should be paid for out of general tax revenues, not development charges. Municipalities counter that the revenues are needed to pay for infrastructure and social services.

ECO Commentary

- Development charges can be used by municipalities as a tool to limit urban sprawl and promote sound development.

The new law restricts the ability of municipalities to apply development charges.

For further detail see p. 102

Proposal for a new *Municipal Act* (AF8E0002)

Proposal posted 7-Apr-98

Decision not posted in 1998

This consultation document contains draft legislation that proposes to restructure the powers of municipalities, the division of responsibilities in a two-tier municipal system, and the general limits on municipal powers. The draft legislation has not yet been introduced in the Legislative Assembly for first reading.

The draft legislation provides more flexibility to municipalities by granting the following powers:

(a) **Natural person powers**, enabling municipalities to conduct their daily business without legislative authority, e.g., entering into agreements, purchasing land and equipment, hiring employees and delegating administrative responsibilities to committees, staff and other bodies.

(b) **Governmental powers**, allowing municipalities to regulate certain activities, requiring individuals to do certain things and establishing a system of licences, permits, approvals and registrations.

(c) **"Spheres of justice,"** enabling municipalities to exercise their natural person and governmental powers in 13 areas, thus removing the need for the comprehensive list of specific municipal powers. Most of these "spheres of justice" are environmentally significant, as they "allow councils to deal with local circumstances, and to avoid the need for amendments to the Act every time a new local issue arises."

Environmental Implications & Public Participation

- Most of the proposed spheres of jurisdiction would have environmental significance. The 13 spheres include:

1. Health, safety, protection and well-being of people and property.
2. Public utilities, e.g., water supply and sewage treatment facilities.
3. Waste management, e.g., recycling, composting, collection, and disposal.
4. Highways, including parking and traffic.
5. Transportation other than highways, e.g., public transit, ferries and local airports.
6. Natural environment, e.g., regulating the placing or dumping of fill.
7. Culture, parks, recreation and heritage.
8. Economic development.
9. Nuisance, odour, vibration, illumination and dust.
10. Drainage and flood control, except storm sewers, e.g., floodplains and purchase of wetlands.
11. Structures, including fences and signs.
12. Parking, except on highways, e.g., parking lots, garages and mandatory spaces for disabled individuals on private parking lots.
13. Animals, e.g., licences, spaying clinics and limits on exotic animals.

ECO Commentary

A one-month comment period was provided for this posting, between April 7, 1998, and May 7, 1998, although certain stakeholders were provided with a longer consultation period outside of the *EBR* process. The posting states that the consultation draft of the proposed legislation was circulated to municipalities and stakeholder groups between February 11, and May 8, 1998.

Given the environmental significance of this proposal, it is unclear why MMAH didn't provide the extended consultation period for the general public through the Registry as it had for its consultation with municipalities and certain stakeholders. This is the second consultation process the ministry has undertaken on this reform proposal. The first round took place in 1997 (see Registry proposal AF7E0003.P).

The proposal is important and far-reaching. The Association of Municipalities of Ontario has informed MMAH that the current draft legislation does not meet the needs of municipal governments and that they are anxious to "get it right."

- The ECO will monitor this proposal.

Bill 56, *Greater Toronto Services Board Act, 1998*
(AF8E0001)

Proposal posted 26-Mar-98

Decision not posted in 1998

Received Royal Assent 18-Dec-98, but not proclaimed in force in 1998

This statute creates the Greater Toronto Services Board (GTSB), which will assume an advisory and coordinating role for the municipalities that make up the Greater Toronto Area (GTA), and will facilitate the integration of inter-regional services in the GTA.

The GTSB is composed of members representing the municipalities in the GTA, and is accountable to those municipalities, not the provincial government.

The statute also establishes the Greater Toronto Transit Authority (GT Transit), which will take over responsibility for operating the GO Transit commuter transportation system serving the GTA and Hamilton-Wentworth. GT Transit will report to the GTSB.

The GTSB will be able to raise funds for its operations by imposing levies on the municipalities it represents, but will have no direct taxing authority. Hamilton-Wentworth will only contribute toward (and will only vote with respect to) the operation of GT Transit.

Environmental Implications & Public Participation

Some of the future decisions and policies of the GTSB and GT Transit will have environmental implications.

The decisions of the GTSB will not be posted on the Registry for public notice and comment. However, if the constituent municipalities require approvals that are prescribed instruments under the *EBR*, these will be posted on the Registry in accordance with normal procedures. Similarly, any changes to provincial laws or policies that are environmentally significant made to accommodate the GTSB should also be posted.

The Bill was controversial among the municipalities that make up the GTA.

The structure, composition and voting formula of the GTSB will be reviewed in 2001. It is intended that the GTSB will evolve over time to assume greater responsibilities as the constituent municipalities become more comfortable with it.

ECO Commentary

One of the goals of the GTSB is to provide advice and facilitate coordination with respect to public transit across the GTA. The GTSB will be able to consider matters relating to the GTA in a manner that will not be constrained by municipal boundaries. It will provide a forum for promoting better coordination and integration of inter-municipal transportation and a regional network. Public transit is a cornerstone of an environmentally sustainable urban area (see section on urban sustainability on p. 84).

The Act transfers responsibility for GO Transit from MTO to the municipalities which it serves, signalling the end of provincial involvement in the operation of public transit.

The GTSB could also provide advice and facilitate coordination with respect to waste management and other environmentally related services within the GTA.

Proposal for a Regulation to establish a development permit system under the *Planning Act*
(PF8E0001)

Proposal posted 21-Apr-98

Decision not posted in 1998

This consultation document proposes a new regulation which would allow municipalities to implement a development permit system, within defined areas, to supplement existing zoning powers.

Development permits would replace the need for zoning by-law amendments and site plan approvals. The development permit issued to the proponent would contain terms and conditions controlling various aspects of a proposal.

Applications for development permits would be considered by municipal planning staff (rather than municipal council) thus expediting the approvals process.

Environmental Implications & Public Participation

Individual development permits or municipal by-laws creating development permit areas could be environmentally significant. These will not be posted on the Registry because they will not be provincial decisions.

ECO Commentary

The development permit system would increase the discretionary power of municipal planning staff and decrease adherence to preset criteria in official plans and zoning by-laws, thus removing planning policy even further from the provincial sphere.

One commenter argues that development permits should be posted as s. 6 information notices.

The ECO will review this decision when posted.

Ministry of Natural Resources (MNR)

Bill 25, *Red Tape Reduction Act, 1998*, Schedule I

(AB8E4001)

Proposal posted 08-Jun-98 (as an information notice)

Decision not posted in 1998

Received Third Reading 10-Dec-98

This Act, referred to as the *Red Tape Reduction Act #1*, is omnibus legislation containing revisions to a number of different Acts administered by various ministries. Schedule I contains amendments to Acts administered by MNR, including the *Public Lands Act (PLA), Conservation Authorities Act (CAA), Lakes and Rivers Improvement Act (LRIA),* and *Crown Forests Sustainability Act*, all of which are prescribed under the *EBR*. The purpose of this Act, as the name suggests, is to reduce "Red Tape" involved in government decision-making.

This legislation was first tabled in 1997 as Bill 119, the *Red Tape Reduction Act, 1996*. Bill 119 died on the order paper when it was not passed before the 1st session of the 36th Legislature ended on Dec. 18, 1997.

Environmental Implications & Public Participation

Amendments to the *CAA* allow conservation authorities to enter into agreements permitting exploration and storage of gas and oil resources on conservation land, permitting extraction to occur on adjoining lands, and to share revenues. These activities can have significant environmental impacts.

Proposals that obtain an approval under the *Aggregates Resources Act* (*ARA*) need not obtain a further approval under the *CAA*.

Under the changes to the *PLA and LRIA*, the minister may make agreements with other agencies regarding the administration of certain activities under these Acts, potentially reducing MNR's oversight of these activities.

Restrictions on the sale of public lands, including maximum size and minimum price, have been removed, and approval of such sales now rests with the minister, not Cabinet.

ECO Commentary

Commenters expressed concern that the delegation of ministerial powers and duties to agencies or persons outside the ministry may result in reduced accountability. MNR has told the ECO it "is currently completing a delegation protocol that will clearly set out MNR's requirements of the delegate under a delegation scenario."

MNR states that this proposal is "in keeping with MNR's goal of ecological sustainability," as expressed in its SEV, but does not elaborate on this.

MNR indicated that this proposal was posted as a s. 6 information notice because Schedule I of Bill 25 nearly replicates Bill 119, and thus was not a new proposal.

Bill 101, *Red Tape Reduction Act #2, 1998*, Schedule M

(AB8E4002)

Proposal posted 16-Dec-98

Decision not posted in 1998

(The Bill died on the order paper when the 2nd session of the 36th Legislature ended on 18-Dec-98)

MNR states that the goal of this Bill is "to amend seven statutes administered by the Ministry to clarify legal ambiguities, eliminate unnecessary red tape, bring statutes up to date, simplify decision-making processes and improve client service."

The statutes that would be amended by Bill 101 include:

a) *Aggregate Resources Act (ARA)*;

b) *Fish Inspection Act*;

c) *Forest Fires Prevention Act*;

d) *Game and Fish Act (GFA)*;

e) *Niagara Escarpment Planning and Development Act (NEPDA)*;

f) *Oil, Gas and Salt Resources Act (OGSRA)*; and,

g) *Public Lands Act (PLA)*.

Environmental Implications & Public Participation

- *ARA* amendments would:

1. Clarify the relationship between municipal by-laws and *ARA* licences.
2. Delete a rehabilitation waiver that is now redundant.
3. Clarify the precedence of site plans and licences over municipal by-laws.
4. Permit technical standards to be adopted by reference in regulations.

According to the MNR, changes to *NEPDA* would:

1. Reduce processing time and complexity pertaining to plan amendments by setting timeframes, eliminating the need for hearings, and eliminating municipal advisory committees.
2. Improve the development control system by providing for delegation by the minister, requiring appellants to state reasons, and allowing frivolous appeals to be dismissed.
3. Extend plan reviews from 5 to every 10 years and enable the minister to prescribe terms of reference for reviews.

GFA amendments would repeal the requirement for pelts to be marked.

OGSRA amendments would permit technical standards to be adopted by reference in regulations.

Changes to the *PLA* permits unregistered letters patent to be cancelled, allowing for quicker sale of land.

ECO Commentary

Bill 101 did not receive approval to be carried forward into the next session of the Legislature and will need to be re-introduced. However, the ministry continues to welcome comments.

The proposed changes to the *NEPDA* follow the recommendations of the Government Task Force on Agencies, Boards and Commissions in its February 1997 "Report on Restructuring Regulatory and Adjudicative Agencies." The Task Force recom-

mended that the Niagara Escarpment Commission (NEC) be retained and that its procedures be streamlined. MNR states that the *NEPDA* is being amended "to allow for more timely decision-making on NEC matters without detriment to the integrity of the objectives of the Niagara Escarpment Plan."

If the Bill is re-introduced in the next session of the Legislature, the ECO will review the decision when posted.

O. Reg. 52/98 amending the definition of "rock" under the *Aggregate Resources Act (ARA)* (RB8E6001)

Proposal posted 09-Jan-98

Decision posted 08-Apr-98

The regulation excludes nine minerals from the definition of "rock" and therefore from the definition of "aggregate" in the *ARA*.

The minerals are andalusite, barite, diamond, gypsum, kaolin, magnesite, phosphate rock, salt and sillimanite.

Environmental Implications & Public Participation

The regulation results in the regulatory responsibility for these nine minerals falling under the *Mining Act (MA)* instead of the *ARA*. These minerals are not used for aggregate or construction purposes.

MNR notes that barite, gypsum and salt are already under the jurisdiction of the *MA* because they are mined underground (salt would also be regulated under the *Oil, Gas and Salt Resources Act*). The amending regulation is intended to provide consistent regulation for these minerals, whether surface-mined or mined underground.

ECO Commentary

The ministry did not receive any comments on this proposal.

This regulation is a positive development and ensures that these minerals will be regulated in a consistent and appropriate manner.

O. Reg. 535/97 designating parts of the Territorial District of Algoma and the Territorial District of Sudbury under the *Aggregate Resources Act (ARA)* (RB7E6007)

Proposal posted 04-Nov-97

Decision posted 08-Apr-98

The regulation increases the lands designated under the *ARA* in various townships in the Territorial Districts of Algoma and Sudbury.

Environmental Implications & Public Participation

More land is subject to the controls of the *ARA* for aggregate resource extraction, a non-renewable resource.

This decision appears to be in keeping with MNR's position that all significant aggregate resource areas of Ontario should be designated under the *ARA*. (This position was outlined in the MNR's response to an application for review filed under the *EBR*.)

ECO Commentary

The ministry did not receive any comments on this proposal.

Other public consultation included discussions with the Regional Municipality of Sudbury, the Sault North Planning Board, and some of the local aggregate producers in the Sault Ste. Marie and Sudbury districts.

Designation under the *ARA* sets out clearer environmental rules. It means that new and existing pits and quarries would have to meet the requirements of the *ARA* including public consultation and operating standards.

Proposed Amendment to Regulation 328, R.R.O. 1990, under the *Endangered Species Act (ESA)*: Listing of the prothonatory warbler as an endangered species (RB8E6019)

Proposal posted 29-Dec-98

Decision not posted in 1998

MNR proposes to amend Regulation 328 under the *ESA* to add the prothonatory warbler to the species presently listed as endangered in the schedule.

The prothonatory warbler (Protonotaria citrea) is a small songbird with golden yellow plumage that inhabits wooded wetlands and swamp forests of central and eastern North America, including southwestern Ontario.

Section 5 of the *ESA* states: "No person shall willfully, (a) kill, injure, interfere with or take or attempt to kill, injure, interfere with or take any species of fauna or flora; or, (b) destroy or interfere with or attempt to destroy or interfere with the habitat of any species of fauna or flora, declared in the regulations to be threatened with extinction."

Environmental Implications & Public Participation

The MNR states that this proposal is consistent with MNR's policy of identifying, interpreting, managing and enhancing plant and animal species native to Ontario that are at risk.

Most populations of the prothonatory warbler are located on lands under public ownership including provincial parks, conservation areas and national wildlife areas.

The species has been designated as nationally endangered by the Committee on the Status of Endangered Wildlife in Canada. Surveys conducted across the warbler's North American range have documented a decline in its population in Ontario since the 1960s. The population has fallen from over 100 pairs in the early 1900s, to a known population in 1998 of 16 pairs and seven single males. The decline probably reflects wetland habitat loss, fluctuating water levels on the Great Lakes, competition for nesting sites and a gradual continental population decline.

MNR states that none of the eight landowners with warbler habitat on their property have expressed serious concerns about the proposal.

ECO Commentary

A similar notice was placed on the Registry on the same day proposing to add the king rail, another marsh bird, to the list of endangered species in Regulation 328.

The protection of endangered species is consistent with the province's commitment under the 1996 National Accord for the Protection of Species at Risk.

The ECO will review this decision when posted.

O. Reg. 347/98 and O. Reg. 348/98 Amendment to O. Reg. 512 under the *Game and Fish Act*

(RB8E6006)

Proposal posted 08-May-98

Decision posted 09-Jun-98

The amendment increases the archery deer hunting season length in 22 Wildlife Management Units (WMUs) or sub-units throughout Ontario.

The amendment also extends the gun season in 8 WMUs that allow the use of shotguns or muzzle-loading rifles. A new shotgun/muzzleloader season is being established in 1 unit and new muzzleloader seasons are being established in 4 units.

Environmental Implications & Public Participation

MNR indicates that the amendment is intended to allow managers greater flexibility to control increasing deer numbers in some Wildlife Management Units where excessive crop damage and vehicle-deer collisions are occurring, while providing increased hunting opportunities.

The amendment will also increase revenues to the province and provide potential for landowners to generate increased revenue from resource users on their land. MNR maintains that increasing season lengths while maintaining control of hunter numbers and the number of deer validation tags will increase recreation without threatening sustainability of the resource.

ECO Commentary

The ministry did not receive any comments on this proposal.

Informal consultations and meetings were held with the Ontario Federation of Anglers and Hunters, the Ontario Federation of Agriculture and other agricultural organizations, OMAFRA, the sporting arms industry and hunters and landowners.

Proposed amendment to O. Reg. 512 under the *Game and Fish Act* (RB8E6008)

Proposal posted 06-Jul-98

Decision not posted in 1998

The amendment opens certain Wildlife Management Units (WMUs) located in northwestern Ontario to moose hunting by non-residents of Ontario.

The proposal is intended to enable tourist outfitters in northwestern Ontario to market moose tags to both residents and non-residents of Ontario.

The proposal does not involve issuing new moose tags. It is intended to remedy an inequity in the market available to outfitters operating in these WMUs, allowing them to market moose tags to non-residents of Ontario as outfitters in other WMUs do.

Environmental Implications & Public Participation

The environmental consequences of the proposal are anticipated to be neutral because the proposal does not involve reallocating or issuing additional moose tags.

The Ontario Moose-Bear Allocation Advisory Committee, which oversees allocation of moose tags to the tourism industry, recommended this proposal. The Northern Ontario Tourist Outfitters and the Ontario Federation of Anglers and Hunters commented on the proposal.

ECO Commentary

The ECO will review this decision when posted.

Eight Regulations made under the *Fish and Wildlife Conservation Act*

(Various Registry numbers; see below)

Proposals posted 16-Jun-98, re-posted on 16-Jul-98 and again on 8-Sep-98 for a total of 129 days;

Decisions not posted in 1998

Regulations filed 16- and 17-Dec-98

This is a regulatory package consisting of eight regulations, each with its own Registry posting, under the new *Fish and Wildlife Conservation Act, 1997*. The regulations were filed on Dec 16 and 17, 1998 and come into force on the day the *FWCA* is proclaimed (January 1, 1999). The regulations are listed below.

O. Reg. 663/98: Area Descriptions (RB8E6009)

O. Reg. 664/98: Fish Licensing (RB8E6010)

O. Reg. 665/98: Hunting (RB8E6011)

O. Reg. 666/98: Possession, Buying and Selling of Wildlife (RB8E6012)

O. Reg. 667/98: Trapping (RB8E6013)

O. Reg. 668/98: Wildlife in Captivity (RB8E6014)

O. Reg. 669/98: Wildlife Schedules (RB8E6015)

O. Reg. 670/98: Open Seasons on Wildlife (RB8E601)

Environmental Implications & Public Participation

No significant changes in intent or direction from the existing regulatory regime.

Main purpose is to consolidate over 60 existing regulations under the *Game and Fish Act* and to implement the provisions of the *FWCA*.

While MNR made extensive efforts to encourage public comment on these proposed regulations, its Registry posting methods for this regulatory package were slightly confusing. First, MNR posted an information proposal in January 1998, stating that it intended to prepare regulations associated with the new *FWCA*. It mentioned that opportunity to comment through the Registry would "be provided at the time that details of the proposed regulatory changes are available." In June, MNR posted eight proposals for new regulations but did not provide an opportunity for the public to see the actual text of the regulations. After concerns were raised by various groups, the proposals were re-posted on July 16, 1998, and the draft regulations made available. They were re-posted a third time on September 8, 1998, with another draft version of the regulations.

ECO Commentary

The Registry postings were slightly confusing but the ministry was following ECO's advice to "post early and post often." The

ministry also responded to the public demand to release the draft regulations before they were in a final form.

MNR missed an opportunity to strengthen and improve its wildlife protection policies through these regulations.

A coalition of 27 environmental and animal protection groups submitted a lengthy comment on the proposed regulations.

Since the decision notices for these regulations were not posted in 1998, MNR has not yet explained how the public comments were taken into account.

Proposed amendment to O. Reg. 828 under the *Niagara Escarpment Planning and Development Act (NEPDA)* (RB8E6005)

Proposal posted 17-Apr-98

Decision not posted in 1998

- The proposed amendment clarifies definitions in the regulation, undertakes housekeeping changes and proposes to expand the number of classes of development that are exempt from requiring a development permit from 19 to 35.
- The stated purpose of the proposal is to streamline the development control process by exempting less environmentally significant proposals from requiring a development permit from the Niagara Escarpment Commission (NEC).
- Most of the activities that would be exempt under the amendment are presently regularly approved by the NEC under the Niagara Escarpment Plan.

Environmental Implications & Public Participation

- If the MNR promulgates its instrument classification regulation as required under the *EBR* and development permits under *NEPDA* are classified as instruments, this proposal would result in fewer instruments being posted for public comment on the Environmental Registry.
- The Escarpment is designated as a World Biosphere Reserve and shelters numerous and diverse animal and plant ecosystems. The *NEPDA* controls development within the Niagara Escarpment Planning Area in order to protect this environmentally sensitive area.

  Apart from losing potential Registry postings, neighbours and interested parties would also lose the notice and appeal rights they have had under the NEPDA as part of the development and control permit approval system.
- The coalition on the Niagara Escarpment raised some valid concerns about this proposal.

(a) An exemption is provided for any size extensions to single dwellings within the planning area.

(b) There is an exemption for the demolition of dwellings, buildings or other structures under 1000 square feet without a requirement to establish whether or not they are a heritage building.

(c) There is a provision that enables property owners on lots greater than 0.8 ha in size to cut 10% of the trees on the property. However, there is no time limit incorporated into this provision to stop repeated cuts of 10% from occurring.

ECO Commentary

- The ECO will review this decision when posted.

Proposed amendment to O. Reg. 278/87 under the *Public Lands Act* (RB8E1003)

Proposal posted 21-May-98

Decision not posted in 1998

- The purpose of the proposal is to reduce the area subject to development control proximate to Lake Shebandowan, a popular recreational lake located 100 kilometres west of Thunder Bay. The lake and surrounding area support resource-based activities such as hunting, trapping, logging, mining and fishing, and the upper basin of the lake still contains a lake trout population.
- In the 1960s a Restricted Area Order (RAO) was issued for the Shebandowan area through a regulation made under s. 13 of the *Public Lands Act*, and was last amended in 1987 (O. Reg. 278/87). The order introduces control on land development in areas without municipal organization.

  In 1996, MNR approved the Shebandowan Lake Management Plan. The plan is an update of a 1984 management plan and directs that the area subject to the RAO be reduced to a depth of 300 metres inland from the shoreline of the lake.

Environmental Implications & Public Participation

MNR maintains that the proposal will implement the approved 1996 Shebandowan Lake Management Plan that was developed between 1991-95 with public consultation.

MNR anticipates that the proposal will be favourably received by the public and that the proposal will result in a significant reduction in the amount of private property subject to development control.

MNR says that economic consequences of the proposal are expected to be positive as it will eliminate development control on structures more than 300 metres away from the lake, permitting landowners to proceed with new development and improvements, subject to any other normally required approvals having been obtained first.

ECO Commentary

The ECO will review this decision when posted.

Proposed revocation of O. Reg. 974 under the *Public Lands Act* (RB8E6007)

Proposal posted 15-Jul-98

Decision not posted in 1998

The purpose of the proposal is to revoke O. Reg. 974, which sets forth mandatory conditions relating to how Crown land summer lots are to be sold and leased. The regulation currently specifies to whom summer resort lots may be sold and leased to and how, and what types of summer resort locations may be developed.

By revoking the regulation, non-residents of Canada will be able to acquire Crown land cottage lots, expanding the market of potential buyers.

Environmental Implications & Public Participation

MNR maintains that the anticipated environmental consequences of this proposal will be neutral because the planning process used to approve all cottage lots for development will be applied in a consistent manner, and the same requirements for lot development will apply to all clients.

ECO Commentary

The ECO will review this decision when posted.

Proposed Amendments to Ontario Regulation 245/97 under the *Oil, Gas and Salt Resources Act* (RB8E3003)

Proposal posted 29-Sept-98

Decision not posted in 1998

O. Reg. 245/97 came into force along with the *Oil, Gas and Salt Resources Act (OGSRA*), and associated provincial standards, on June 27, 1997. This regulation and the standards replaced regulations under the *Petroleum Resources Act* (which the *OGSRA* was enacted to replace).

Since it came into force, several errors, omissions and ambiguities have been discovered in the regulation, and the proposed amendments would address these.

The proposed amendments would:

(a) apply trust fee and security deposit exemptions fully to private well owners;

(b) clarify limitations on the authority to drill wells under well licences;

(c) re-introduce the requirement of basic well control;

(d) simplify the description of general well spacing requirements and clarify deadlines for spacing applications;

(e) clarify when well security is to be established; and,

(f) remove requirements to report routine daily or weekly examinations by certified examiners.

Environmental Implications & Public Participation

MNR states that the environmental, economic and social consequences of the proposal are anticipated to be negligible and that the proposal does not have objectives explicitly related to the environment.

MNR further states that the need for the proposed amendments arose as a result of problems identified by MNR staff and various oil and gas industry stakeholders, including the Ontario Petroleum Institute, the Ontario Federation of Agriculture, and individual oil and gas operators.

MNR states that these amendments will bring about consistency with the government's original intentions related to regulating oil, gas and salt resource activities.

ECO Commentary

MNR posted the proposal for O. Reg. 245/97 in March 1997 for a 30-day comment period and undertook minimal additional consultations at the time. For example, public meetings were not held before the final regulations were passed into law in July 1997. (For a short description of the March 1997 proposal, see the ECO's 1997 annual report supplement, p. 9.)

The MNR later hosted public meetings in Sarnia, London, Simcoe and Cayuga during the spring and summer of 1998 on the requirements of the *OGSRA* and its regulations.

If MNR had posted the proposal for O. Reg 245/97 for a longer period and undertaken better consultations on its original proposal in the spring of 1997 before promulgating the regulation, these amendments might have been avoided.

MNR has proposed further amendments to the *ARA* related to these provisions: see ***Bill 101, Red Tape Reduction Act, 1998*, Schedule M** (AB8E4002).

Ministry of Northern Development and Mines (MNDM)

O. Reg. 356/98 under the *Mining Act*, regarding the staking of mining claims in environmentally sensitive areas of Ontario (RD8E0001)

Proposal posted 17-Feb-98

Decision posted 03-Sept-98

- The regulation modifies staking practices so as to minimize impacts on environmentally sensitive areas.
- Measures include prohibitions against blazing trees and cutting, pruning or delimbing trees for staking purposes.

Environmental Implications & Public Participation

- This regulation was developed as a result of a land use strategy developed for the Temagami Planning Area by a local planning council and adopted by the provincial government. The strategy identified certain areas that required special staking and exploration requirements to mitigate environmental impacts. Although originally developed for Temagami, this regulation can be applied to other areas in Ontario that warrant similar cautions.

ECO Commentary

- MNR made a similar regulation under the *Public Lands Act* in September, requiring work permits for disruptive mineral exploration practices in five environmentally sensitive areas listed in a schedule. This regulation was posted on the Registry as a proposal (RB8E2001) with a 30-day comment period; however, no comments were received.
- MNDM worked cooperatively with local residents to develop this regulation, which will minimize the environmental impact of reopening Temagami to mining.

APPENDIX D

Ministry of Environment — Regulatory Review 1997/1998

Better, Stronger, Clearer: Environmental Regulations for Ontario

Proposed Amendments Posted on the Environmental Registry

Air Quality

Proposed Consolidation of O. Regs. 660/85, 661/85, 663/85 and Regulation 355 ("Acid Rain Regulations") made under the *Environmental Protection Act* (RA7E0030)

Proposal posted 30-Dec-97

Decision not posted in 1998

- Would replace four previous regulations which limit sulphur dioxide (and, in one case, nitric oxide) emissions released by four companies: Inco, Falconbridge, Algoma Steel, and Ontario Hydro.
- Under the new regulation, emissions limits would remain the same; reporting would be reduced from four times or twice, to once per year.

Environmental Implications and Public Participation

- MOE states that the changes streamline existing regulations and make some administrative changes, while maintaining the same emission standards.

ECO Commentary

- MOE's proposal would reduce reporting and would not create stricter standards in the regulations to fight acid rain, which is an ongoing problem affecting Ontario's lakes and forests. (See ECO review of acid rain in the 1996 Annual Report at p. 20.)
- The ECO will review this decision when posted.

Environmental Practices Guide for Hot Mix Asphalt Facilities to Supplement Regulation 349 (Hot Mix Asphalt Facilities) made under the *Environmental Protection Act* (RA7E0031)

Proposal posted 30-Dec-97

Decision posted 13-Jul-98

- In Responsive Environmental Protection (REP), MOE had proposed to revoke Regulation 349, which prohibits visible emissions and materials, including water plumes, from impinging outside the property line of hot mix asphalt facilities, and replace it with a voluntary code under a standardized approval regulation.
- This decision retains Regulation 349 and supplements it with a voluntary code of practice that has been developed by the Ontario Hot Mix Producers Association in consultation with MOE.

Environmental Implications and Public Participation

- MOE states that retention of Regulation 349 ensures that minimum standards of environmental protection will be met.
- Voluntary code of practice encourages further measures, on the part of industry, to protect the environment.
- MOE changed its original proposal outlined in REP following expressions of concern by stakeholders about the enforcement of a voluntary code of practice.

ECO Commentary

- MOE took into account comments received during consultation and retained the regulation.

Retention of Regulation 361 (Sulphur Content of Fuels) and Regulation 338 (Boilers) made under the *Environmental Protection Act*, with a new standardized approval regulation (RA7E0032)

Proposal posted 15-Jan-98, as an exception, hence decision will not be posted

- Both regulations are retained, to which will be added a standardized approval regulation (SAR) for new small combustion equipment. The new SAR was proposed in a separate Registry posting.
- In REP, MOE had proposed to revoke both regulations and replace them with a standardized approval regulation to control the sulphur content of fuels.
- Regulation 338 was originally made to address concerns with sulphate deposition in acid-sensitive ecosystems in Ontario. Regulation 361 was made in order to address severe local air quality problems.

Environmental Implications and Public Participation

- The majority of submissions from the public about this proposal under REP opposed revoking the two existing regulations, as the costs associated with compliance are negligible and the environmental benefits significant.
- According to MOE, the proposed SAR would provide an alternative way for combustion equipment to be installed, if the conditions in the SAR were met. The SAR is expected to influence users to select fuels with lower sulphur content.

ECO Commentary

- MOE took into account comments received on the REP proposal during the consultation period and decided to retain the regulations.

- See entry on concepts for standardized approval regulations in this chart, below, and the discussion of SARs and AERs on p. 157, for more information on SARs.

Proposed amendments to Regulation 338 (Boilers) and Regulation 361 (Sulphur Content of Fuels) made under the *Environmental Protection Act*

(RA8E0035)

Proposal posted 20-Nov-98

Decision not posted in 1998

- As part of REP, MOE proposed to amend Section 2.(1) of Regulation 338 to clarify the types of physical modifications to boilers to which the regulation applies.
- Under this proposal, boilers which undergo physical modifications that change their ability to use fuel and that result in the ability to fire fuel that is of a different type or grade and that has a higher sulphur content, or that increase the maximum heat input capacity of the boiler at its maximum continuous rating will not be subject to approvals requirement.
- The proposal also includes administrative "housekeeping" amendments to Regulation 361.

Environmental Implications and Public Participation

- MOE states that the proposed amendment is expected to be favourable from a resource conservation perspective since it will eliminate uncertainty, which was hampering voluntary conservation efforts (e.g., combustion efficiency improvements).
- MOE states that the remainder of Regulation 338 will remain in force to ensure that acid-sensitive ecosystems in Ontario are protected.
- The amendment to Regulation 338 was proposed following the comments of an industrial association.

ECO Commentary

- MOE took into account comments received on the REP proposal.
- The ECO will review this decision when it is made by MOE.

O. Reg. 361/98 replacing O. Reg. 353/90 (Motor Vehicles) made under the *Environmental Protection Act* (RA8E0021)

Proposal posted 21-May-98

Decision posted 20-Jul-98

- The regulation revokes and replaces O. Reg. 353/90.
- The regulation updates the current test procedures, technology and emission standards for passenger vehicles, trucks and buses in support of the ministry's proposed Drive Clean vehicle inspection and maintenance program.
- Standards to determine a "pass" or "fail" will be based on emissions that may be expected from a properly tuned vehicle of that particular model and year. Standards for passenger vehicles will be progressively tightened over the years.
- Related amendments will be made to the *Highway Traffic Act* to require that vehicles pass an emissions inspection in order for an owner to renew a vehicle registration or transfer ownership.

Environmental Implications and Public Participation

- MOE's proposal states that the fully implemented program is expected to reduce emissions of smog-causing NO_x and VOCs by 62,000 tonnes, microscopic particulates by 220 tonnes, as well as emissions of carbon dioxide, a significant greenhouse gas, by up to 900,000 tonnes, annually.
- Drive Clean is intended to enhance air quality in southern Ontario, where smog is a serious problem, in an affordable, convenient and fair way.
- Five sets of comments on the proposal were received by MOE, none of which required significant changes to the proposed amendment, according to the decision posting.

ECO Commentary

- The original proposal was included as part of REP.
- O. Reg 401/98 made several minor amendments to this regulation that were not environmentally significant and were not posted on the Registry.

(see separate review of MOE's Drive Clean initiative on p. 45)

Proposed amendments to Regulation 350 made under the *Environmental Protection Act* - Lambton Industry Meteorological Alert (LIMA) Regulation and draft Memorandum of Understanding

(RA8E0032)

Proposal posted 05-Oct-98

Decision not posted in 1998

- As part of REP, the ministry initially proposed to revoke the current regulation and replace it with a Memorandum of Understanding (MOU) that would allow local companies greater flexibility in operating the system and resolving air pollution problems in Lambton County.
- In Better, Stronger, Cleaner (BSC), the ministry proposed to maintain and improve the current regulation, while streamlining certain administrative requirements. The regulation would be reinforced by a MOU with the Lambton Industrial Society (LIS). According to MOE, one of the purposes of the MOU is "to provide a cost savings for industry while providing greater environmental protection."
- Based on public comments, the following changes to the regulation and the Lambton Industry Meteorological Alert Regulation ("the Alert system") are proposed:

(1) An alert would be called based on sulphur dioxide (SO_2) ambient air quality measurements only and not on a combination of SO_2 ambient air quality and meteorological forecasts.

(2) The LIS would assume full responsibility for operating the Alert system; however, MOE will maintain the authority to initiate and terminate an alert.

(3) The air monitoring station in Port Huron, Michigan, would be removed (reducing the number of stations from 4 to 3). Discontinuing the station will result in an annual savings of $30,000 for the LIS. MOE says that measured SO_2 concentrations at this station have triggered only one alert since promulgation of the regulation in March 1981, and the levels have consistently met federal and state standards.

(4) The wording of the description of the geographic area that is affected by the regulation will be updated; however, the area remains the same.

This is an administrative change only and will not change the operation of the Alert system.

Environmental Implications and Public Participation

- A number of industry associations and companies supported the original REP proposal as valid, efficient and cost-effective; however, concern was expressed by both individuals and environmental organizations that the existing regulation be maintained as a safeguard.
- MOE states that the changes provide improved environmental protection since alerts will be called when the ambient air concentration of SO_2 reaches 0.07 parts per million based on a 24 hour running average.
- The current regulation requires curtailment of operations only if adverse weather conditions are forecast to persist for the next six hours during periods of high SO_2 concentrations. MOE claims that the LIS has demonstrated a good record of environmental performance and provides annual meetings with the public on their environmental performance, including the Alert system. In addition, the LIS has developed an early warning procedure referred to as Lambton Industrial Society Advisory (LISA) to provide advanced warning of potential LIMA conditions.
- MOE also states that the LIS has developed and implemented an air monitoring program for ozone, ethylene, total reduced sulphur, non-methane hydrocarbons, nitrogen oxides, suspended particulate matter and meteorological parameters.
- The LIS will notify MOE's Spills Action Centre when the air pollution concentrations are such that an alert needs to be initiated or terminated and the LIS will notify the affected industries of these situations.

ECO Commentary

- SO_2 concentration data would no longer be sent to the ministry on a continuous basis using a dedicated communications link. Instead, it will be provided to the ministry upon request. This would result in a savings of $10,000 per year for the LIS. While the ministry will maintain the authority to initiate and terminate the alerts, it is unclear whether it will always have adequate information to make these decisions in a timely manner, particularly if equipment breaks down or fails after MOE requests that data be forwarded.
- The ministry would also continue to enforce the regulation and audit the LIMA system. This would include auditing after the fact to ensure the accuracy of air monitoring instruments, reviewing data from the air monitoring stations, and obtaining reports from the LIS on the performance of the system. The air monitoring station in Centennial Park, Sarnia, will be utilized by the LIS as part of the new Alert system.
- The ECO will review this decision when posted.

Approvals

O. Reg. 326/98 amending O. Reg. 82/95 made under the *Energy Efficiency Act* (RA8E0004)

Proposal posted 21-Jan-98

Decision posted 17-Jul-98

- This regulation ensures that new appliances and other energy using products sold or leased in Ontario meet minimum efficiency standards. The amendments:
- Set minimum efficiency levels for fluorescent lamps, gas-fired wall furnaces and gas-fired room heaters.
- Update referenced national standards for electric water heaters, dusk-to-dawn overhead lights on roads and cobra-head type overhead lights.
- Delay compliance dates for 1-15 hp electric induction motors, transformers and refrigeration chillers and revoke obsolete compliance dates for six existing products.
- Correct typographical errors and revoke obsolete compliance dates for six existing products.

Environmental Implications and Public Participation

- Energy efficiency standards benefit the environment by reducing the environmental impacts of energy use, which include air pollution, greenhouse gases and global warming.

ECO Commentary

- The Ontario government missed an opportunity to promote better energy efficiency standards and help to achieve Ontario government commitments to reduce greenhouse gas emissions.
- The amendments were intended to bring Ontario into line with international standards, but because of the government's "Red Tape" review, MOE delayed putting them in place for several years after they were originally proposed.
- Ontario was once considered a North American leader in energy efficiency standards. Now Ontario is about two years behind the U.S. in implementing stricter efficiency standards in some areas such as refrigeration technology.
- This decision was made jointly by the Minister of the Environment and the Minister of Energy, Science and Technology after administration of the Act was moved to MEST in October 1997.

Proposed revocation of Regulation 933 (Water Heaters) made under the *Power Corporation Act* (RA8E0007)

Proposal posted 22-Jan-98

Decision posted 17-Jul-98

- Revokes regulation that required electric stationary storage water heaters to meet certain standards to ensure energy efficiency.
- Water heaters are now regulated under another regulation (O. Reg. 82/95), which states that the products described in Reg. 933 are no longer allowed to be offered for sale or lease in Ontario.

Environmental Implications and Public Participation

- Neutral impact on environment

ECO Commentary

- The *Power Corporation Act* is not a prescribed statute.
- The Act has been administered by the Ministry of Energy, Science and Technology since being established in October 1997.

Concepts for Proposed Standardized Approvals Regulations (SARs) and Approval Exemption Regulations (AERs) under the *EPA* and *OWRA* — air, sewage and water, and waste (RA8E0008)

Proposal posted 10-Feb-98

Decision posted 6-Oct-98

- SARS and AERs will replace the need to obtain certificates of approval (Cs of A) for activities which are predictable and controllable, have well-understood environmental impacts, and are conducted in compliance with requirements and conditions set out in regulations.
- Proponents relying on SARs will have to notify the ministry of their proposed activities; AERs do not have a notification requirement; they provide an outright exemption.
- The ministry's abatement and enforcement powers will continue to apply and environmental standards will not be lowered.
- The decision posting states that two regulations for AERs (air and water and sewage) were filed on September 30, 1998, with no further opportunity for public comment, but that proposed regulations creating SARs would be re-posted prior to finalization for additional public comment.

Environmental Implications and Public Participation

- The public notice and comment requirements of the *EBR* would not apply to activities covered by SARs and AERs, thus curtailing some existing environmental rights.
- For example, many of the Cs of A that will be replaced by SARs are currently air and waste site approval instruments prescribed for posting on the Registry.
- The public also will lose the following rights:

1. The right to seek leave to appeal of MOE decisions on Class I or II instruments subject to SAR or AER regulations.
2. The right to make an application for review requesting an existing approval be reviewed and updated.

- Ontario residents will maintain their right to apply for an investigation under the *EBR* if they suspect that proponents have contravened the provisions of SARs and AERs.

ECO Commentary

- The actual draft regulations that would create SARs have not been released by the ministry. The ECO will continue to monitor the development of the regulations.
- The proposal does not set out how the ministry intends to enforce the conditions contained in the regulations.
- Some observers contend that the defence of statutory authorization in civil actions for nuisance will apply to activities covered by SARs. For example, the *Ontario Water Resources Act* (*OWRA*) contains an explicit defence of statutory authorization, and this may be available to proponents relying on SARs developed under the *OWRA*.
- There should be provision in the regulations for maintaining a registry of the sites and facilities that are operating under SARs so that the information is available to the public. MOE will be unable to create such a registry for AERs because it will not receive notice of use of AERs by companies.
- The regulations creating AERs (O. Reg. 524/98 and O. Reg. 525/98), filed September 30, 1998, should have been posted as proposals for further public comment, as required under s. 16 of the *EBR*.
- See discussion of SARs and AERs on p. 157.

Proposed Amendments to O. Reg. 524/98 - (Certificate of Approval Exemptions - air) made under the *Environmental Protection Act*, and O. Reg. 525/98 - (Certificate of Approval Exemptions - water and sewage) made under the *Ontario Water Resources Act* (RA8E00036)

Proposal posted 2-Dec-98

Decision not posted in 1998

- These two AER regulations were originally made as part of the initial concepts proposal for standardized approval regulations (SARs) and approval exemption regulations (AERs). The regulations were not posted separately on the Registry.
- The proposed amendments to the regulations would add nine new categories of approval exemptions to the existing 20 categories under the two AERs.
- Examples of activities or equipment that fall under AERs are: a fireplace or wood stove, an air conditioning unit, the replacement of an existing water main or sewer with a similar one, emissions from racetrack grounds or fairgrounds, and the taking of water related to an emergency declared under the *Emergency Plans Act*.

Environmental Implications and Public Participation

- In its proposal, MOE states its abatement and enforcement powers would continue to apply to all of the activities under the AERs that may cause environmentally adverse effects and environmental standards would not be lowered. The approvals reform is designed to make the environmental rules clearer and more efficient while ensuring the continued level of environmental protection.

- One implication of this new approach to emissions from these types of facilities is that municipalities will be required to fill any voids in regulation caused by MOE's vacating the field. Residents in a township near Peterborough have expressed serious concerns about the AER which would apply to racetracks. The township also has expressed concern that MOE is downloading its enforcement responsibility to it, and the township does not have staff or expertise to regulate noise and air pollution from racetracks.

ECO Commentary
- See entry on concepts for standardized approval regulations in this chart, above, and the review of SARs and AERs on p. 157.
- In early 1999, MOE extended the comment period for this proposal because of controversy about the proposed AERs for racetracks.
- The ECO will review this decision when posted.

ENVIRONMENTAL ASSESSMENT

O. Reg. 325/98 - revoking Regulation 335 made under the *Environmental Assessment Act* (RA8E0002)

Proposal posted 20-Jan-98

Decision posted 16-Jul-98

- Revokes Reg. 335 (the Rules of Practice for the Environmental Assessment Board - EAB) as it is now obsolete.
- In 1996, the EAB revised its procedures by preparing new Rules of Procedure under the authority of the *Statutory Power Procedures Act* (*SPPA*).

Environmental Implications and Public Participation
- EAB consulted with representatives of the environmental community through the Internet and other means when preparing new Rules of Procedure.

ECO Commentary
- Amendment is really a housekeeping amendment that reflects powers of Boards under the *SPPA* to make their own procedural rules.

O. Reg. 437/98 revoking obsolete Exemption Orders made under the *Environmental Assessment Act* (RA8E0003)

Proposal posted 20-Jan-98

Decision posted 16-Jul-98

- Revokes a total of 300 obsolete Exemption Order regulations or orders-in-council issued since 1976 under clause 29(b) of the old *Environmental Assessment Act*.
- In some cases, MOE and the public sector proponents that were covered by these orders have developed Parent Class Environmental Assessment approvals for the types of projects that were exempted by the orders, and are now providing a higher level of EA scrutiny for these project types.

Environmental Implications and Public Participation
- The Ministry considered the proposal to revoke these orders to be purely administrative, but posted it anyway. There were no public comments on the proposal.

ECO Commentary
- Mainly administrative; no significant environmental effects.

ENVIRONMENTAL BILL OF RIGHTS

O. Reg. 179/98 - amendments to O. Reg. 73/94 (General) made under the *Environmental Bill of Rights* (RA7E0028)

Proposal posted 30-Dec-97

Decision posted 14-May-98

- Amendments update the regulation to reflect name changes to ministries and Acts that had occurred since the regulation was prepared.
- The regulation deems certain orders under the amended *EAA* to be regulations for the purposes of the *EBR* and its regulations, such as a minister's declaration that the *EAA* does not apply to an undertaking. Exemptions made under s. 29 of the *EAA* before Jan.1/97 will also be deemed to be regulations.
- The regulation expressly states that MOE will operate the Environmental Registry.

Environmental Implications and Public Participation
- The changes revise the regulation to reflect several changes to ministry and Act names. For example, the regulation prescribes the Ministry of Energy, Science and Technology (MEST) for parts of the *EBR*. This is noteworthy because it will cause several important MEST proposals for new Acts, regulations and policies related to restructuring Ontario's electricity markets to be posted on the Registry for public comment and review by the ECO, as required by the *EBR*.

ECO Commentary
- Amendments as proposed in REP with a few additions.
- MOE's assumption of responsibility for the Registry is a positive development. The need to clarify responsibilities with respect to operation of the Registry was identified in the ECO's 1994-95 annual report.

O. Reg. 180/98 - amendments to O. Reg. 681/94 (Classification of Proposals for Instruments) made under the *Environmental Bill of Rights* (RA7E0029)

Proposal posted 30-Dec-97

Decision posted 14-May-98

- The amendments prescribe instruments for the Ministry of Consumer and Commercial Relations (MCCR) and the Ministry of Northern Development and Mines (MNDM).
- In REP, MOE had proposed removing instruments it claimed had little environmental significance from the instrument classification regulation. As a result of comments received and other reform activities undertaken by the ministry, the ministry decided not to remove instruments from this regulation.

Environmental Implications and Public Participation
- Amendments fulfil the requirement under the *EBR*, for MCCR and MNDM to classify their instruments.
- The ministries' respective instrument classifications in this regulation will determine which instruments under the *Gasoline Handling Act* and *Mining Act* will receive public notice through posting on the Registry, and which instruments may be appealed, reviewed or investigated under the *EBR*.

ECO Commentary

- MOE took account of comments received during the original consultation for this proposal that took place as part of REP and during the comment period for this posting, and decided not to remove instruments from its instrument classification regulation. The instruments will thus still be subject to the *EBR*'s public participation processes. As one commenter noted, however, the issue of notice requirements for standardized approvals remains unresolved. The posting states that this "concern will be addressed as part of the consultation on Standardized Approvals."

Pesticides

O. Regs. 405/98, 482/98 and 484/98 amending Regulation 914 made under the *Pesticides Act*

Two proposals: (RA5E0031) Proposal posted 2-Oct-95

Decision posted 16-Sept-98

(RA6E0010)

Proposal posted 13-Aug-96

Decision posted 16-Sept-98

- Regulation 914 is the general regulation under the *Pesticides Act* covering the sale, use, storage, transportation and disposal of pesticides, and the training and licensing requirements of pesticide operators.
- These regulations include numerous amendments to Regulation 914; some are substantive but most are predominantly administrative. Substantive amendments include:
- Products registered under the federal *Fertilizers Act* now fall within ambit of provincial *Pesticides Act* (in addition to products registered under federal *Pest Control Products Act*).
- Procedures for proper disposal of empty pesticide containers.
- Updated licensing requirements, training, fees and exemptions for operators, and training and supervision requirements for unlicensed assistants.
- Categories of licences reduced from 53 to 18.
- Exemption from licensing requirement for certain kinds of low toxicity exterminations, to encourage reduction of more toxic pesticides.
- Removal of references to obsolete pesticides from regulation.

Environmental Implications and Public Participation

- The amendments are intended to clarify, consolidate, modernize and streamline Regulation 914, making it more current and comprehensible to users.
- MOE took two years to develop the proposed amendments, during which time stakeholders were consulted directly.
- A total of 117 comments were received by MOE for the two proposals related to this decision, but only a small proportion of the comments were received during the *EBR* comment period.

ECO Commentary

- The Registry postings for these regulations were confusing to the public since they contained similar types of amendments to Regulation 914 but were not cross-referenced. A third posting for amendments to Regulation 914 (RA7E0037 - see separate description, this page), also finalized in 1998, added to the confusion.
- The proposals were posted on the Registry prior to REP, but were later incorporated in REP.

O. Reg. 129/98 amending Regulation 914 made under the *Pesticides Act* (RA7E0037)

Proposal posted 24-Dec-97

Decision posted 14-Apr-98

- The regulation sets out rules by which scheduled pesticides can be applied, either by certified agriculturists, non-certified agriculturists under the supervision of certified agriculturists, or non-certified agriculturists without supervision.
- The proposed amendment would allow agriculturists under the supervision of certified agriculturists to apply Schedule 2 and 5 pesticides (currently the regulation allows only certified agriculturists to apply Schedule 2 and 5 pesticides after March 31, 1998).
- The proposed amendment would allow agriculturists to apply Schedule 3 pesticides without supervision, as homeowners always have been allowed to do. (Currently, the regulation allows only certified agriculturists to apply Schedule 3 pesticides after March 31, 1998.)

Environmental Implications and Public Participation

- The proposed amendment strengthens the guidelines for supervision of non-certified agriculturists by certified agriculturists, and places on the supervisor responsibility for the acts and omissions of non-certified agriculturists and labourers.
- Requires a non-certified agriculturists who applies Schedule 2 and 5 pesticides to attend a course on safe pesticide use, but no exam required.
- For Schedule 2 and 5 pesticides, only a certified agriculturist may decide on the pesticide mix to be used, purchase the products, and oversee proper storage.
- Removes the certification requirement for Schedule 3 pesticides on the basis that these pesticides are readily available to untrained homeowners, who are not certified.

ECO Commentary

- New guidelines on supervision and pesticide use are positive steps in ensuring safe use of pesticides.
- The ECO does not agree that rules regarding the use of Schedule 3 pesticides should apply equally to homeowners and agriculturists since the latter are likely to use greater quantities over larger tracts of land; they should not necessarily be treated the same in terms of certification requirements for pesticide use because the environmental implications may be different.
- MOE has substituted supervision for certification of pesticide users in some cases.

SPILLS

O. Reg. 675/98 amending Regulation 360 (Classification and Exemption of Spills) made under the *Environmental Protection Act* (RA8E0017)

Proposal posted 3-Apr-98; re-posted to extend the comment period to 63 days

Decision not posted in 1998

Regulation filed 17-Dec-98

- The amendment exempts some spills from some requirements of Part X (Spills) of the *Environmental Protection Act,* notably the requirement to report spills to the Ministry of the Environment and local authorities.
- Companies that create a contingency plan for spills may designate some spills as non-reportable.
- Other spills are exempted whether or not a contingency plan exists; for example, spills of under 100 litres of oil from transformers.
- The obligation of owners, carriers, and persons in control of spilled substances to clean up spills and report them if they can't successfully clean them up is unaffected by the changes.
- It has been estimated that the change will reduce the number of reported spills by about 1,000 to 1,500 (20%) per year.

Environmental Implications and Public Participation

- Spills can contaminate land, surface waters and groundwater, and can be very expensive to clean up.
- The ministry says it believes that the large number of small spills reported under the previous regulation inhibited its ability to respond to spills which were more likely to cause adverse effects.
- A good understanding of spills occurrence trends can be used to target problem areas, and to focus prevention programs.
- MOE plans to set quantity limits for specific industries, but some observers comment that the type of contaminant and the circumstances of the spill must also be considered.

ECO Commentary

- Because reporting of spills is reduced, the ability of MOE to monitor the total volume of spills and to understand and model cumulative impacts may be negatively affected.
- MOE's ability to identify chronic sources of small spills is reduced, and this could have a negative impact on pollution prevention work by MOE and by industry.
- MOE says the exemption is intended to redirect resources toward more serious spills, but it is unclear how this will occur, and MOE has provided no details.
- Exemptions which existed in the previous regulation have been clarified in some cases. For example, if a company wishes to undertake a "planned spill," it must be considered essential for the maintenance of its pollution control system, and it must be pre-approved by MOE. This is a positive development.

WASTE MANAGEMENT

Proposed revocation of Regulation 344 (Disposal Containers for Milk) and amendment of Regulation 345 (Disposal Paper Containers for Milk) made under the *Environmental Protection Act* (RA8E0005)

Proposal posted 22-Jan-98; re-posted with changes 14-Aug-98

Decision not posted in 1998

- Would revoke Regulation 344, whose original purpose was to prohibit the sale of milk in disposable containers, thus preserving refillable milk containers. However, numerous exemptions to Regulation 344 were made to allow non-refillable containers to be used. Since refillable containers for milk are no longer used in any measurable way, the desired effect of Regulation 344 has been lost.
- Proposed amendments to Regulation 345 would remove restrictions on milk packaging that are 2 litres and under in size. This would allow industry greater flexibility in packaging options for smaller-sized milk containers.
- The current requirement that restricts packaging greater than 2 litres in size to plastic film pouches will remain in place; exemptions would apply only to packaging that is subject to a deposit-return system for refilling or recycling.

Environmental Implications and Public Participation

- The initial proposal, posted 22-Jan-98, was to revoke Regulations 344 and 345 and not to replace them at all. As a result of submissions received during the comment period, the ministry decided to change its original proposal to the current proposal. A second comment period was provided, for 60 days.
- The original approach of Regulation 344, which this proposal would abandon, was to encourage the reuse of milk containers. Hence this proposal has negative environmental implications. This is an example of regulations being made to support current consumption and waste generation patterns, rather than promoting product stewardship.

ECO Commentary

- MOE should introduce a comprehensive beverage container policy that incorporates the principles of product stewardship or extended product responsibility and encourages the reduction and reuse of packaging materials
- The ECO will review this decision when posted.
- This report contains a comprehensive discussion of product stewardship and extended product responsibility at p. 107.
- Any new packaging for milk should be developed in keeping with the 3Rs (reduction, reuse and recycling) hierarchy in the National Packaging Protocol. The 3Rs hierarchy suggests that packaging measures that promote reduction and reuse should be undertaken before recycling measures are implemented.

O. Reg. 323/98 revoking Regulation 348 (Hauled Liquid Industrial Waste Disposal Sites) made under the *Environmental Protection Act* (RA8E0006)

Proposal posted 22-Jan-98

Decision posted 17-Jul-98

- Revokes regulation that sets out requirements, operating standards and exemptions for eight waste disposal sites that accepted hazardous liquid industrial wastes in 1981.
- The revoked regulation stated that sites which received a certificate of approval after December 1, 1981, were exempted from the regulation.
- The regulation is obsolete: one of the eight sites is closed, six are operating under certificates of approval and no longer accept such waste, and the eighth, located in Sarnia, continues to accept hazardous liquid industrial waste in accordance with a certificate of approval.

Environmental Implications and Public Participation

- No comments were made on this REP proposal and two comments, both supportive, were made in response to this posting.
- No environmental impact, as the regulation had ceased to apply to all eight sites.

ECO Commentary

- The amendments are consistent with those outlined in REP and BSC.

O. Reg. 191/98 - Amendment to Regulation 347 made under the *Environmental Protection Act* (*EPA*) (RA8E0016)

Proposal posted 16-Mar-98

Decision posted 23-Jul-98

- Amends Reg. 347 s. 28.2 (2) which exempted woodwaste combustor sites from the requirement for a s. 30 (1) hearing under the *EPA* if not more than 600 tonnes of woodwaste was combusted at the site and the heat from the combustion was recovered and utilized. Woodwaste combustor sites are now exempt from the requirement for a hearing under s. 30 (1) of the *EPA* if the heat from the combustion is recovered and utilized.
- The proposal also contained information about two applications for certificates of approval for the Potter Station Power Co. Inc. and Spruce Falls Inc.
- The Spruce Falls proposal involves handling and burning biomass, including 720 tonnes of on-site generated woodwaste; 216 tonnes per day of off-site generated woodwaste; and 270 tonnes per day of on-site generated process sludge. Bottom and fly-ash will be disposed of at an on-site approved landfill. The applicant will require certificates of approval for air and waste.

Environmental Implications and Public Participation

- The Potter Station proposal involves an 850 tonne per day energy from green (untreated) wood waste facility installed at Trans Canada Pipe Line Station 88 near Hearst, Ontario. The facility is intended to produce 34.65 MW for delivery to an Ontario Hydro line at Hearst. The applicant will be required to have certificates of approval for air and waste.
- One comment was made by a lawyer on behalf of a client respecting the Potter Station Power Co.'s proposal and the potential impact on their client's rights. A subsequent letter, dated May 11, 1998, withdrew the original objections.

ECO Commentary

- There will be environmental benefits from diverting waste from disposal while creating a source of energy; however, these woodwaste combustors will generate increased air emissions such as carbon dioxide to the local airshed.

Proposed consolidation of existing waste management regulations made under the *Environmental Protection Act* (RA8E0023)

Proposal posted 2-Jun-98

Decision not posted in 1998

- Revision and consolidation of eight existing regulations, including Reg. 347 - General Waste Management, into one waste management regulation.
- The proposed regulation amends and consolidates eight separate *EPA* regulations: O. Reg. 347 (general waste management); Reg. 341 (deep well disposal); Reg. 352 (mobile PCB destruction facilities); Reg. 362 (waste management - PCBs); Reg. 101/94 (municipal waste recycling and composting); 102/94 (waste audits and waste reduction work plans); 103/94 (industrial, commercial and institutional waste reduction work plans); 104/94 (packaging audits and packaging reduction work plans). Once the regulation is in force, these regulations will be revoked.

Environmental Implications and Public Participation

- The proposal for the new regulation follows the directions set out in REP and BSC, classifying waste management facilities into four classes of approval, Classes I - IV, in decreasing order of risk. MOE indicates that this is intended to address a lack of consistency between technical standards, approval requirements and the potential environmental risk of a proposed activity.
- The proposal also would create Standardized Approval Regulations, or SARs. These allow waste sites and systems to operate as long as the standards in the regulation are met, including registration with MOE. MOE selected candidates for SARs based on the predictability of the environmental impacts and the mitigating measures for those impacts. The SARs in this regulation include:

1. On-site storage of liquid and hazardous wastes
2. Selected waste depots
3. Household hazardous waste depots
4. Non-hazardous waste-derived fuels
5. Manufacturer controlled networks
6. Dust suppression

ECO Commentary

- Class III facilities and systems would be subject to a SAR instead of a site-specific certificate of approval.
- Class IV facilities and systems would be deemed to have limited environmental impacts and do not need site-specific waste management certificates of approval or registration with MOE. (These exemptions will be described in approval exemption

regulations, or "AERs.") Because the environmental impacts of these activities are more minimal, more limited rules apply.

- SAR and AER regulations are problematic from an *EBR* perspective, because MOE appears to be suggesting that activities covered by SARs are not environmentally significant, even though at present they may be classified as environmentally significant instruments under the *EBR*.
- See entry on concepts for standardized approval regulations in this chart, above, and on SARs and AERs on p. 157 for more information on SARs.
- The ECO will review this decision when posted.

Proposed amendment to Regulation 347 made under the *Environmental Protection Act* (Criteria for the Management of Excess Soil) (RA8E0030)

Proposal posted 20-Aug-98

Decision not posted in 1998

- The Registry posting indicates that the proposed amendment would replace the existing definition of "inert fill" in Regulation 347 with a clearer and more comprehensive definition which would allow stakeholders to better manage the movement of excess soil and rock as fill during site cleanup.
- Proposed definition of "inert fill" would include four classifications based on soil quality and effects-based cleanup criteria for the particular land use, as provided in the "Guideline for Use at Contaminated Sites in Ontario."
- Class I fill is based on rural parkland background soil values and can be deposited anywhere (includes clean brick and concrete); Class II inert fill is based on urban parkland background values and may be deposited at receiving sites designated as residential; Class III and Class IV inert fills are based on the cleanup criteria, and the placement of these classes of inert fill is determined by whether the receiving site is designated as agricultural, commercial or industrial land use.

Environmental Implications and Public Participation

- The movement and placement of excess soil which meets the new inert fill definition will remain exempt from Part V of the *EPA*, "waste management approval requirements."
- According to MOE, the proposed amendments ensure that soil movement requirements are protective of human health and the environment.
- Public consultation on an initial proposal to amend the inert fill definition was undertaken in 1992 by MOE's Advisory Committee on Environmental Standards (ACES).

ECO Commentary

- One commenter says the new approach is simpler and less stringent than ACES' 1993 recommendations. The 1998 proposals "will mean that substantial quantities of low-level contaminated soil will be freed from regulatory controls. This soil will no longer have to be disposed in licensed landfill sites, significantly decreasing the cost of site clean-up and redevelopment."
- The ECO will review this decision when posted.

Water Quality

O. Reg. 177/98 - revoking and replacing O. Reg. 77/92 (Exemption for Ground Source Heat Pumps), made under the *Environmental Protection Act* (RA7E0017)

Proposal posted 24-Dec-97

Decision posted 13-May-98

- This regulation bans the use of methanol as a heat transfer agent in new ground source heat pumps.
- Prohibits the alteration, extension or replacement of existing ground source heat pumps that use methanol.

Environmental Implications and Public Participation

- Methanol is a highly toxic agent that can contaminate groundwater and cause death through either severe doses or prolonged exposure.
- Environmentally superior alternatives to methanol have been in wide use since 1992.
- Heat pumps using methanol installed before the regulation takes effect are grandparented.

ECO Commentary

- Amendment updates regulation to reflect current science and technology.

Proposed amendments to O. Reg. 561/94 (Industrial Minerals Sector), made under the *Environmental Protection Act* (MISA reg) (RA7E0020)

Proposed amendments to O. Reg. 64/95 (Inorganic Manufacturing Sector Regulation), made under the *EPA* (MISA reg) (RA7E0021)

Proposed amendments to O. Reg. 560/94 (Metal Mining Sector Regulation), made under the *EPA* (MISA reg) (RA7E0023)

Proposed amendments to O. Reg. 63/95 (Organic Chemical Manufacturing Sector Regulation), made under the *EPA* (MISA reg) (RA7E0024)

All proposals posted 30-Dec-97

Decisions not yet posted

- Would reduce the frequency of chronic toxicity (CT) testing of effluent from semi-annual to annual for "excellent performers" following three years of semi-annual CT testing and adequate data collection.
- CT testing is carried out in order to understand the sub-lethal effects of the effluent.
- Would remove requirement to monitor parameters not used or present on site for 24 consecutive months; discharger would continue to monitor these parameters annually and reinstate more frequent monitoring if limits were exceeded.

Environmental Implications and Public Participation

- Because CT testing is important in determining whether effluent may cause harm over a long period of time, some scientists, toxicology experts and environmental groups support more frequent CT testing. They point out that effluent quality often has seasonal variations and companies will be more vigilant if they are subject to regular testing. In addition, there is a desire to ensure that the government has as much data as possible. However, as the ECO pointed out in its 1997 annual report, MOE is not analyzing the CT testing data collected by dischargers under the MISA program and provided to its regional and district offices.
- The Ontario Chapter of the Canadian Chemical Producers Association (CPPA) states in its REP submission that adequate data on sub-lethal effects already has been collected on most facilities operating under the MISA regulations. The CPPA also points out that many federal laws and regulations require only annual chronic toxicity testing. In some sectors, effluent monitoring predates the MISA regulations and has been under way since the mid-1980s.

ECO Commentary

- Amendments as proposed in REP.
- The ministry's proposed approach — reward good actors and require bad actors to continue CT testing — would strike a reasonable balance between environmental goals and economic objectives.
- It seems unlikely that companies with large variations in effluent quality will be eligible to participate in the reduced CT testing program. MOE says that if there is a compliance problem that causes sub-lethal effects, it should be discovered by regular effluent monitoring that these companies will continue to do.
- The reduction in CT testing would be extended to "companies that consistently demonstrate that they can meet and comply with effluent limits" and is intended to provide an incentive for excellent performance.
- The ECO will review these decisions when posted.
- NOTE: for RA7E0024, see related Registry posting: RA7E0013.D
- NOTE: for RA7E0021, see related Registry posting: RA7E0014.D

Proposed amendments to O. REG. 760/93 (Pulp and Paper Sector Regulation), made under the *EPA* (MISA reg) (RA7E0025)

Proposal posted 31-Dec-97

Decision not posted in 1998

- Would remove the requirement that dischargers of AOX (total adsorbable organic halides) submit reports over time on how to eliminate AOX by year 2002, but introduce requirement that MOE review the science on AOX in relation to its goal of eliminating generation of AOX.
- Would advance the date when dischargers must meet standard of 0.8 kg AOX/tonne of pulp from December 31, 1999, to the date this regulatory amendment is filed.
- Would reduce chronic toxicity testing frequency from semi-annual to annual for "excellent performers" following three years of semi-annual chronic toxicity testing and once MOE decides adequate data is available to understand the sub-lethal effects of the effluent.
- Would reduce monitoring requirements from daily to three days a week where effluent parameters are equal to or less than 75% of the limit for 12 consecutive months; more frequent monitoring would be reinstated if limits were exceeded.
- Would remove requirement to monitor parameters not used or present on site for 24 consecutive months; discharger would continue to monitor these parameters annually and reinstate more frequent monitoring if limits were exceeded.

Environmental Implications and Public Participation

- For discussion of AOX proposals, see next listing.
- The pulp and paper industry states that adequate data on sub-lethal effects already have been collected on most facilities operating under the MISA regulations. They also point out that many federal laws and regulations require only annual chronic toxicity testing. In some sectors, effluent monitoring predates the MISA regulations and has been under way since the mid-1980s.
- Because chronic toxicity (CT) testing is important in determining whether effluent may cause harm over a long period of time, some scientists, toxicology experts and environmental groups support more frequent CT testing.

ECO Commentary

- For a discussion of the AOX proposals, see next listing.
- The ministry's proposed approach — reward good actors and require bad actors to continue CT testing — strikes a reasonable balance between environmental goals and economic objectives.
- Companies with large variations in effluent quality would not be eligible to participate in the reduced CT testing program. If there is a compliance problem that causes sub-lethal effects, it should be discovered by regular effluent monitoring that these companies will continue to do.
- The reduction in CT testing would be extended to "companies that consistently demonstrate that they can meet and comply with effluent limits" and is intended to provide an incentive for excellent performance.
- The ECO will review this decision when posted.

O. Reg. 645/98 amending O. REG. 760/93 (Pulp and Paper Sector Regulation), made under the *EPA* (MISA reg) (RA7E0025)

Proposal posted 31-Dec-97

Decision not posted in 1998

Regulation filed 10-Dec-98

- This regulation implements amendments to O. Reg. 760/93 dealing with AOX (total adsorbable organic halides) emissions from the pulp and paper sector as suggested in BSC and outlined above in Registry Posting RA7E0025. However, it does not implement the amendments dealing with chronicity testing.
- Advances the date that dischargers must meet standard of 0.8 kg AOX/tonne of pulp from December 31, 1999, to December 31, 1998.
- Removes the immediate requirement that dischargers of AOX submit reports on how to eliminate AOX by year 2002. However, the goal to eliminate AOX remains for now.

Environmental Implications and Public Participation

- The environmental impact of AOX emissions remains unclear. Some studies suggest that any AOX emissions may be harmful, while MOE relies upon a report stating that only emissions above 1.5kg/tonne have detrimental impacts.
- These changes do not have any immediate impacts on the environment as all dischargers currently meet the standard of 0.8 kg/tonne that must be reached by Dec. 31, 1998.
- The removal of the requirement that dischargers submit elimination plans may have a long-term negative impact on the environment because the requirement was meant to encourage the development of innovative technologies to deal with AOX generation. The science on AOX may not produce new technologies if the deadline for elimination of AOX by 2002 is perceived to be in jeopardy.

ECO Commentary

- In REP, MOE proposed to remove both the requirement to submit elimination plans and the requirement to achieve zero discharge of AOX. However, MOE announced in BSC that the decision whether to maintain the requirement of zero discharge of AOX by the year 2002 will now be determined upon the completion of a review being carried out by a consortium of researchers facilitated by the University of Toronto, to be completed by the year 2000.
- Pending the outcome of this review, further amendments to O. Reg. 760/93, if required, will be posted on the Environmental Registry.
- The ECO will review further amendments if and when they are posted.

Regulation 351 (Marinas Regulation) made under the *Environmental Protection Act*; supplementary voluntary code (RA7E0027)

Proposal posted 30-Dec-97

Decision posted 17-Apr-98

- Regulation requires marinas to provide and maintain waste management facilities for boaters: litter containers and facilities for pumping out waste tanks.
- MOE will retain the current regulation and supplement it with a voluntary code of practice which has been produced by the Ontario Marina Operators Association.
- MOE's earlier proposal was to revoke this regulation and replace it entirely with a voluntary code.

Environmental Implications and Public Participation

- MOE changed its position after public and stakeholder comments were made on the REP proposal. The key public concern was that not all marinas would follow the voluntary code, so that a backdrop regulation was needed.

ECO Commentary

- MOE responded to public comments on the need for marinas to continue to provide and maintain waste management and pump out facilities for boaters; thus the original regulation will be maintained.
- Public commentary on this proposal improved MOE's decision and resulted in a better outcome for environmental protection.

O. Reg. 539/98 amending O. Reg. 435/93 (Water Works and Sewage Works) made under the *Ontario Water Resources Act* (RA8E0012)

Proposal posted 23-Feb-98; Re-posted 25-May-98 for further comment

Decision not posted in 1998

Regulation filed 5-Oct-98

- The amendments increase (from 100,000 litres/day to 200,000 litres/day) current licensing exemptions for seasonal drinking water systems in campgrounds if owners complete an MOE training course on water treatment.
- Changes some of the licensing requirements and processes for operators-in-training and operators.
- Excludes septic systems from the regulation as a result of amendments to *OWRA*.

Environmental Implications and Public Participation

- Relates, in part, to transfer of sewage systems from *EPA* to *Building Code Act*.
- No significant environmental effects.
- Regulation was re-posted after comments received during the initial comment period led to a change in the proposal regarding operators-in-training licences.

ECO Commentary

- MOE's re-posting of this proposal was appropriate.
- Many of the changes have been made to clarify the regulations or update them in accordance with actual practice.

O. Reg. 462/98 revoking Regulation 902 made under the *Ontario Water Resources Act* (RA8E0019)

Proposal posted 15-Apr-98

Decision posted 23-Oct-98

- Regulation 902 relates to pre-1974 agreements between municipalities and the provincial government relating to capital cost repayment for water and sewage projects. It is now obsolete because all such agreements have either come to an end or have been amended to reflect new financing arrangements.

Environmental Implications and Public Participation

- No environmental significance; purely administrative.
- No comments were received by MOE.

Proposed amendments to Regulation 903 (Water Wells) made under the *Ontario Water Resources Act* (RA8E0025)

Proposal posted 25-Aug-98

Decision not posted in 1998

- Regulation 903 governs the construction, maintenance and abandonment of water wells and licensing of water well contractors and technicians.
- The proposed amendments would clarify the wording of the regulation to clear up misinterpretations, address construction practices which currently put groundwater supplies at risk, specify requirements for wells not being used for potable supplies, and adjust licensing costs.

Environmental Implications and Public Participation

- Several pre-consultation meetings were held with major stakeholders. The proposal has evolved considerably since the original proposal contained in REP, due to comments received from stakeholders.
- The comment period for this proposal was 90 days, and the Registry consultation was undertaken to coincide simultaneously with direct consultations with water well licensees.

ECO Commentary

- The proposed amendments either enhance environmental protection or are neutral.
- The ECO will review this decision when posted.

APPENDIX E — Selected Unposted Decisions Reviewed in 1998

Agriculture, Food and Rural Affairs

Nutrient Management Planning Guidelines

Unposted Decision

- A guideline booklet intended to advise farmers on how to implement environmentally appropriate nutrient management practices.

Ministry Reasons for Not Posting

- The Nutrient Management Planning Guidelines is a technical document prepared jointly by OMAFRA and the farming community to provide advice to farmers wishing to implement environmental management practices on their farms. The document can be considered part of OMAFRA's Research and Technology Transfer core business, and is not a ministry policy. Use of the Guidelines is strictly voluntary. Therefore, this is not a decision subject to the *EBR*.

ECO Commentary

- Since the Guidelines document has environmental dimensions, it should have been posted as a policy on the Registry.

Consumer and Commercial Relations - Technical Standards and Safety Authority

Proposed reform of public safety legislation

Unposted Decision

- The Technical Standards and Safety Authority is in the early stages of planning a comprehensive reform to the seven public safety statutes under its jurisdiction.
- Early consultation with key stakeholders began in August 1997.
- ECO sent a letter to the TSSA in September 1998, urging it to post a notice of the proposed legislative reforms on the Registry.

Ministry Reasons for Not Posting

- TSSA concurs with the ECO that public participation in environmental decision-making is useful.
- TSSA agrees to post a notice of this proposal as soon as it receives approval from Cabinet Office for the proposed legislative reform.

ECO Commentary

- On October 21, 1998, two notices were posted on the Registry with respect to this proposal: one was posted by MCCR with a 30-day public comment period, and the other one was posted by TSSA as an information notice (see summary of the proposal as posted in Appendix C.)

Economic Development, Trade and Tourism

Privatization of ORTECH

Unposted Decision

- ORTECH is an agency of MEDTT that provides high-level testing and analysis in the transportation, materials technology, bio-technology, information technology, and environmental services sectors.
- The proposal is to sell ORTECH to the private sector, pursuant to the Ontario Privatization Review Framework.

Ministry Reasons for Not Posting

- The decision to privatize ORTECH was made by the government's Privatization Secretariat and not by MEDTT. The decision was likely financial/administrative but MEDTT did not want to respond on behalf of the Privatization Secretariat.

ECO Commentary

- Ministry response is valid; since the Privatization Secretariat is not a prescribed agency this decision is not subject to the *EBR*.

Environment

Reforms to air quality standards

Unposted Decision

- In March 1998, MOE developed a background discussion paper on development and implementation of air quality standards.
- The background paper invited stakeholder input but was not posted on the Registry; it was used at an MOE workshop on air quality standard-setting held in September 1998.

Ministry Reasons for Not Posting

- The public has had the opportunity to comment on issues raised in the background paper through the "Three Year Plan" to revise 70 air quality standards, posted on the Registry in 1996 (PA6E0014), or by commenting on the nine individual proposed standards that were posted in March 1998.
- MOE's public consultation on air quality standards has included several information sessions and a stakeholder workshop.

ECO Commentary

- Ministry response is inappropriate because MOE has made changes to its Three Year Plan and is now proposing to replace it with an updated "Standards Setting Plan." Also, the opportunity to comment on individual standards is not a substitute for an opportunity to comment on the process of developing standards.
- Efforts at consultation referred to by the ministry have been by invitation, not open to the general public.
- ECO will monitor MOE's future public consultation on its plan to set air quality standards.

The Ontario Great Lakes Renewal Foundation

Unposted Decision

- The provincial government has established the Ontario Great Lakes Renewal Foundation (also referred to as Great Lakes Ontario), a non-profit organization with $5 million in seed capital, to fund cleanup projects and habitat restoration, support research, raise awareness, and seek further donations from the private and non-profit sector.

Ministry Reasons for Not Posting

- This decision was part of the May 1998 Provincial Budget Statement and is therefore excepted from the posting requirement by virtue of s. 33(1) of the *EBR* (budget or economic statement presented to the Assembly).

ECO Commentary

- Ministry response is valid. However, since the Ontario Great Lakes Renewal Foundation has environmental dimensions, it would have been appropriate to post a s. 6 information notice on the Registry.

Revision of the Blue Box recycling program

Unposted Decision

- MOE proposes to revise and improve the Blue Box recycling program, and has pledged $4 million in funding from the LCBO.
- The changes should increase participation in the program, increase the number of materials recycled, and reduce the cost to municipal taxpayers.

ECO Commentary

- The ECO requested information from MOE on this proposal in early November. Unfortunately, MOE did not provided a rationale for not posting this decision by the end of 1998.

Health

Mandatory Health Programs and Services Guidelines

Unposted Decision

- These guidelines set the general standard for health hazard investigations and mandate local public health departments to take action to address environmental risks.
- Authorized by s. 7 of the *Health Protection and Promotion Act.*

Ministry Reasons for Not Posting

- The Mandatory Health Programs and Services Guidelines (MHPSGs) are a revision of similar 1989 guidelines.
- Not environmentally significant because focus is on the protection and promotion of health of individuals, not the protection or conservation of the natural environment.

ECO Commentary

- The approach of MOH ignores the impact of environmental quality on individual health; some of the objectives stated in the MHPSGs could be advanced through better environmental protection.
- Ministry did not consider its SEV.
- The MHPSGs should have been posted on the Registry for public comment.
- See the ECO's review of MOH's SEV at p. 12 of this report.

Establishment of Cancer Care Ontario

Unposted Decision

- Cancer Care Ontario was established in April 1997, to provide direction and leadership in the medical treatment of cancer, to develop standards and guidelines for care, to ensure that cancer patients have access to a coordinated system of the most contemporary and effective services.
- Goals include: increasing prevention and screening, strengthening research efforts, improving the quality of life for people with cancer.

Ministry Reasons for Not Posting

- Cancer Care Ontario is not a new program, but represents an administrative decision to rename the Ontario Cancer Treatment and Research Foundation.

ECO Commentary

- Ministry response is valid; the decision is not environmentally significant and thus not subject to the *EBR.*

Management Board Secretariat

Revision of MBS Directive on Real Property and Accommodation

Unposted Decision

- MBS revised its "Directive on Real Property and Accommodation."
- According to MBS's Statement of Environmental Values, its real estate activities have the greatest potential for impact on the natural environment.

Ministry Reasons for Not Posting

- The Directive was updated to reflect current practices previously approved by government. MBS's SEV was considered, but the Directive is predominantly financial and administrative in nature, hence exempt from Registry posting requirements.
- MBS has indicated its intention to post the Directive on the Registry as an information notice in the future.

ECO Commentary

- A question and answer sheet on MBS's own Intranet site states that the revisions to the Directive include new directions approved by Management Board of Cabinet.
- One of the new directions involves developing new criteria for identifying surplus/underused property to be sold by the Crown: this could be environmentally significant.
- According to MBS's own *EBR* Procedures Manual, this revision should have been considered non-administrative and environmentally significant and should have been posted on the Registry for public notification and comment.
- Please see page 16 in this report relating to MBS's SEV.

MUNICIPAL AFFAIRS AND HOUSING

Proposed legislation to create a Greater Toronto Services Board

Unposted Decision
- Act would create the Greater Toronto Services Board, made up of representatives from regional councils in Greater Toronto, whose function would be to integrate inter-regional services, including GO Transit.

Ministry Reasons for Not Posting
- Notice of the proposed legislation was posted on the Registry for public comment after the ECO inquiry letter was sent.

ECO Commentary
- By posting the proposal at an early stage in the process (prior to First Reading), MMAH provided the public with a fair opportunity to comment on this important piece of legislation.

O. Reg. 524/97 made under the *Planning Act* (amending By-law No. 74-53 of King Township)

Unposted Decision
- Amends the local by-law for an area of land called the "Schomberg Area," changing the zoning for most of that area from rural to industrial, and for a small portion of the area from rural to open space and conservation.
- The *Planning Act* was not prescribed under the *EBR* until April 1, 1998, but ECO wrote a letter to MMAH asking about SEV consideration for this decision.

Ministry Reasons for Not Posting
- The provisions of MMAH's SEV were incorporated into the decision-making process.

ECO Commentary
- Ministry response is valid. However, it would have been appropriate to post a s. 6 information notice on the Registry.

O. Reg. 158/98 amending O. Reg. 414/86 made under the *Planning Act*

Unposted Decision
- Re: zoning areas, Territorial District of Thunder Bay, Geographic Township of Ware — amendments to zoning regulations for areas adjacent to aggregate operations.
- This regulation amends a Minister's Zoning Order (MZO), which is a regulation analogous to a municipal zoning by-law.

Ministry Reasons for Not Posting
- MMAH is currently analysing how the *EBR* applies to proposals under the *Planning Act*, including MZOs.
- This MZO underwent substantial public consultation and was basically completed prior to April 1, 1998, when proposals for regulations under the *Planning Act* became subject to the *EBR* posting requirements.
- This amendment brings the MZO into conformity with the Planning Board's new Official Plan.
- This decision is compatible with MMAH's SEV, particularly principles encouraging stronger provincial/municipal relationships and endorsing local municipal government accountability.

ECO Commentary
- Ministry response is valid. However, it would have been appropriate to post a s. 6 information notice on the Registry.
- MZOs are regulations under the *Planning Act* and therefore subject to the posting requirement under s. 16(1) of the *EBR*.

O. Reg. 159/98 amending O. Reg. 219/75 made under the *Planning Act*

Unposted Decision
- Re: restricted areas, District of Thunder Bay, Geographic Townships of Pearson and Scoble — amendments to zoning regulations for areas adjacent to aggregate operations.
- This regulation amends a Minister's Zoning Order (MZO), which is a regulation analogous to a municipal zoning by-law.

Ministry Reasons for Not Posting
- See response for O. Reg 158/98, on this page.

ECO Commentary
- See commentary for O. Reg 158/98, above.

O. Reg. 160/98 amending O. Reg. 413/86 made under the *Planning Act*

Unposted Decision
- Re: zoning areas, Territorial District of Thunder Bay, Geographic Township of Goreham — amendments to zoning regulations for areas adjacent to aggregate operations.
- This regulation amends a Minister's Zoning Order (MZO), which is a regulation analogous to a municipal zoning by-law.

Ministry Reasons for Not Posting
- See response for O. Reg 158/98, on this page.

ECO Commentary
- See commentary for O. Reg 158/98, above.

O. Reg. 163/98 amending O. Reg. 834/81 made under the *Planning Act*

Unposted Decision
- Re: restricted areas, District of Sudbury, Territorial District of Sudbury — allows the erection of seasonal dwellings as an exception to the Order mandated under Reg. 834/81.
- This regulation amends a Minister's Zoning Order (MZO), which is a regulation analogous to a municipal zoning by-law.

Ministry Reasons for Not Posting
- This amendment is a site-specific minor variance to the parent MZO, with no environmental impacts, hence no requirement to post on the Registry.
- The provisions of the SEV were inherent in the decision-making process for this matter.

ECO Commentary
- Ministry response is valid.

O. Reg. 700/98 amending O. Reg. 27 /96 made under the *Municipal Act*

Unposted Decision

- Prevents a municipality from requiring vendors of alcoholic beverages to maintain a system for the return of containers.
- Since the *Municipal Act* is not prescribed under the *EBR*, the ECO asked the ministry whether it considered its SEV when making this decision and also suggested posting an information notice on the Registry.
- This regulation was passed in order to nullify the City of Toronto's by-law requiring the Liquor Control Board of Ontario to take back empty liquor and wine bottles.

Ministry Reasons for Not Posting

- The ministry did consider its SEV: this decision is in keeping with the SEV principle of clarifying roles of the provincial and municipal levels of government.
- The responsibility for establishing the regulatory framework for Ontario's waste recycling system rests with the province, not individual municipalities.
- The introduction of a deposit-refund system would be incompatible with the Blue Box program.
- There was no need for an information posting on the Registry because information about this regulation was widely circulated by the ministry and extensively covered by the media.
- The information circulated by MMAH was sent to the heads of municipal councils affected by the regulation.

ECO Commentary

- Considering the environmental significance of this decision, MMAH should have posted a s.6 information notice on the Registry, to notify the general public.

Reinstatement of Shoreline Property Assistance Program

Unposted Decision

- As a result of severe storms and the threat of future flooding in Essex Region, MMAH decided to reinstate its Shoreline Property Assistance Program to assist property owners to erect barriers against future storms and erosion.

Ministry Reasons for Not Posting

- This program has been in place since the 1970s. It is reactivated automatically whenever certain disaster conditions occur, as they did this spring on Lake Erie. The ministry does not consider this a decision, hence no need to post on the Registry.

ECO Commentary

- Ministry response is valid.

Implementation Strategy for Delegation/Exemption under the *Planning Act*

Unposted Decision

- This strategy outlines MMAH's plans to delegate the minister's approval authority for consents, subdivision approvals, etc., to municipalities.
- It also outlines the ministry's plans to exempt specified municipalities from the requirement to have amendments to their official plans approved by the province.
- MMAH plans to retain approval authority for the official plans of planning boards, and upper tier and single tier municipalities.

Ministry Reasons for Not Posting

- This strategy is not a new government initiative, but, rather, implements portions of the *Planning Act*, which were amended in 1996 and posted on the Registry for public comment.
- The ministry considers decisions regarding the strategy to be administrative in nature, and thus did not post the strategy on the Registry.
- The strategy will assist in achieving principles set down in MMAH's draft SEV.

ECO Commentary

- Inappropriate exception.
- The *Planning Act* gives the minister the power to delegate and exempt approval authority; MMAH's decisions about how and when to use the delegation/exemption provisions in the *Planning Act* are not purely administrative.
- The strategy itself acknowledges its environmental significance, stating that "this approach [to exemption] reflects the need to protect the broader provincial and regional interests and protect as well such things as infrastructure and sensitive environmental resources across municipal boundaries."

Natural Resources

O. Reg. 448/97 amending O. Reg. 167/95 made under the *Crown Forest Sustainability Act*

Unposted Decision

- Revokes sections of O. Reg 167/95 dealing with Crown charges payable by holders of forest resource licences.
- The method of calculating the charges has changed and the charges may be set by the minister (without an authorizing regulation) by virtue of amendments to the *Crown Forest Sustainability Act*.

Ministry Reasons for Not Posting

- The changes are unlikely to result in significant effects on the environment because they are primarily financial in nature and there are no changes proposed to the charges for harvesting Crown timber.
- SEV was not considered since decision is not environmentally significant.

ECO Commentary

- The SEV should be considered when determining whether a decision is environmentally significant.

O. Reg. 142/98 amending Regulation 149 made under the *Conservation Authorities Act*

Unposted Decision

- Regulation 149 is entitled "Fill, Construction and Alteration to Waterways — Grand River," and it prohibits construction, placing of fill or altering of waterways within the flood areas described in the schedules.
- O. Reg. 142/98 adds three new schedules to Regulation 149, relating to smaller waterways within the Grand River watershed.

Ministry Reasons for Not Posting

- The decision was not posted because of a misunderstanding on the part of MNR staff.
- MNR procedures are being revised to identify clearly when posting of regulations under the *Conservation Authorities Act* is required.
- Public consultation did take place for this regulation, and the regulation is consistent with MNR's SEV.

ECO Commentary

- In 1997 the ECO sent an inquiry letter relating to the making of a similar regulation, O. Reg. 282/97 entitled "Fill, Construction and Alteration to Waterways — Otonabee Region Conservation Authority." In its response, MNR conceded that the Registry posting was mistakenly overlooked, and committed to posting on the Registry future regulations under the *Conservation Authorities Act*.
- The ministry has failed to comply with the *EBR*; this is a repeated mistake by MNR.

Agreement between MNR and the Ontario Commercial Fisheries Association

Unposted Decision

- Under the Agreement, the Ontario Commercial Fisheries Association (OCFA) will assume a major role in the delivery of four areas of commercial fishery management: record-keeping of commercial fish harvests; administration of royalties; compliance monitoring; and data collection.

Ministry Reasons for Not Posting

- Underlying principle of the Agreement is that sound resource management will not be compromised.
- MNR still retains responsibility for determining appropriate harvest levels; allocating resources among user groups; issuing licences; and law enforcement.
- Agreement is unlikely to result in any significant impacts on the environment.
- MNR's SEV was considered.
- The Agreement will result in less MNR time spent on administrative procedures, allowing greater attention to fisheries science, population and habitat management and law enforcement.

ECO Commentary

- MNR's response is not valid.
- Data entry of fish harvests and checking commercial catches are significant responsibilities and set up a situation of potential conflict of interest for the OCFA.
- MNR states that it still retains control over fish harvesting and the integrity of data by checking catches and conducting periodic spot checks and audits, and by cross-checking reports completed by fishers against landed weights.

Proposed pilot project to extend season for bass fishing in Lake Erie

Unposted Decision

- Bass fishing season in Lake Erie would commence during the spring instead of the traditional commencement date of the last Saturday of June, with potential adverse consequences to the bass spawning season.

Ministry Reasons for Not Posting

- The season for bass fishing in Lake Erie is governed by regulation under the federal *Fisheries Act*, which is not a prescribed Act under the *EBR* for posting proposals to amend regulations. Therefore a regulatory amendment changing the bass fishing season does not need to be posted on the Registry.

ECO Commentary

- Ministry response is valid. However, it would have been appropriate to post a s. 6 information notice since the decision was environmentally significant.

Agreements between federal DFO and local conservation authorities

Unposted Decision

- An agreement template has been developed, to be signed by the federal Department of Fisheries and Oceans and individual conservation authorities, regarding fish habitat management and work sharing.
- At least one conservation authority (the Toronto Region CA) has signed the agreement with DFO, and others might have as well.

Ministry Reasons for Not Posting

- Since MNR is not a party to the agreement and has no influence over its content, this is not a policy of MNR and therefore MNR has no obligation to post it on the Registry.

ECO Commentary

- Ministry response is valid.

Review of policies and procedures for approving dispositions of conservation authority lands

Unposted Decision

- MNR revised its policies and procedures for approving dispositions of conservation authority lands. Revised policy is dated June 13, 1997. Based on feedback from conservation authorities and other groups, MNR plans to update this policy further.
- In the course of an ECO review of an application for review regarding the sale of some public land for development in Pickering, it came to the attention of ECO staff that MNR was in the process of revising its policies and procedures for approving dispositions of conservation authority lands. MNR turned down the application, even though part of the application requested a review of these very policies and procedures, on the grounds that the existing policies and procedures are adequate.

Ministry Reasons for Not Posting

- The earlier revision to the policies and procedures for the disposition of conservation authority property was made in 1996 pursuant to the *Savings and Restructuring Act*, 1996. It was not posted on the Registry because of an exemption from the EBR s. 15 posting requirement extended to measures aimed at reducing expenditures under the *Savings and Restructuring Act*, 1996. This exemption was in force from November 29, 1995 until September 30, 1996.
- The policies and procedures are going to be updated and revised again, and MNR will meet its *EBR* obligations for new proposals or revisions that are environmentally significant.

ECO Commentary

- The ECO will monitor the progress of the planned revision and ensure that MNR meets the requirements of the *EBR*.

Revision of wildlife management policies

Unposted Decision

- MNR's wildlife management policies are being reviewed and revised in anticipation of the proclamation of the new *Fish and Wildlife Conservation Act*.
- The policy review will include consideration of program objectives and targets related to population size and status of key wildlife species.

Ministry Reasons for Not Posting

- MNR intends to give notice on the Registry of new environmentally significant policies, except those whose substance has already been the subject of public comment through the many postings of the *Fish and Wildlife Conservation Act* and regulations.

ECO Commentary

- The ECO will continue to monitor the posting of MNR's new fish and wildlife management policies.

Creation of advisory committee for gray wolf strategy in Algonquin Park

Unposted Decision

- The advisory committee, to be composed of representatives from environmental, hunting and trapping groups, scientists, and local citizens, will assist MNR in the development of a conservation strategy for the gray wolf in Algonquin Park, whose population appears to be decreasing. Algonquin Park is the largest protected area for gray wolves.

Ministry Reasons for Not Posting

- The ministry does not consider this initiative as a policy, Act, or regulation that could have a significant effect on the environment.
- The decision is predominately administrative in nature.
- The decision does not result in harm to the environment.
- Public input was not required prior to making a decision and the public was notified of the ministry's intent to establish an advisory committee through a ministry news release and a posting on the ministry's Homepage.
- The decision is consistent with the ministry's SEV.

ECO Commentary

- "Policy" is defined as a "program, plan or objective" in the *EBR* and "significant effect" includes a positive effect on the environment. Hence, the ECO considers this decision to be subject to the posting requirements of the *EBR*.
- The ECO and MNR have different interpretations of "policy" and will continue to have discussions on how to interpret this term and the corresponding Registry posting requirements.
- MNR has committed to posting for public comment policies that arise out of the work of the committee.
- Another means of public notification cannot serve as a substitute for posting a notice of proposal on the Registry.

Northern Development and Mines

Agreement between MNDM and Nishnawbe-Aski Nation re: development of northern resources

Unposted Decision

- MNDM, together with MNR and other affected ministries, is developing the framework for an agreement between MNDM and the Nishnawbe-Aski Nation to develop energy resources, forestry, mining, hydro-electric and tourism in areas north of the 51st parallel.

Ministry Reasons for Not Posting

- Negotiations are ongoing for an interim agreement which will in turn lead to a long-term protocol.
- Nothing has been agreed upon so far that would merit being posted on the Registry. As matters progress, ministry will keep in mind the desirability of posting a proposal notice to obtain public input.

ECO Commentary

- The ECO will monitor the progress of these negotiations and ensure that MNDM posts a proposal on the Registry as soon as a draft agreement is ready for public release.

Cat Lake First Nation Power Project

Unposted Decision

- Funding of $3,375 million provided through the Northern Ontario Heritage Fund Corporation (NOHFC) to the Cat Lake First Nation, to assist the community to gain access to existing power lines instead of relying on diesel generators.
- In discussions with MNDM staff, the ECO suggested that the NOHFC could be delegated as a decision-making body under the *EBR*, similar to the Technical Standards and Safety Authority (TSSA), which was delegated certain *EBR* responsibilities under a 1997 delegation by MCCR.

Ministry Reasons for Not Posting

- The decision to fund the Cat Lake First Nation power project was made by the NOHFC, an agency not subject to the *EBR*, not by MNDM.
- MNDM says that NOHFC is not similar to TSSA and it would not be appropriate for MNDM to delegate its *EBR* responsibilities to NOHFC.
- NOHFC funding decisions are financial and therefore would be exempt from the *EBR* posting requirements even if NOHFC were subject to the *EBR*.

- NOHFC decisions are posted on NOHFC's Internet website for public notification.

ECO Commentary
- Ministry response is valid.
- For the purposes of the *EBR*, the NOHFC is different from the TSSA.
- Both are corporations governed by a board of directors and created by statute. However, the NOHFC deals with decisions that can be considered mainly financial (issuing grants) while the TSSA makes regulatory decisions.
- In addition, the NOHFC was created in 1988 and functions independently from MNDM. The TSSA was created in 1996 and maintains close ties with MCCR, its parent ministry.
- NOHFC could also be prescribed under s.121(1)(b) of the *EBR* if MNDM passed a regulation doing so.

Transportation

Financial assistance for GO Transit

Unposted Decision
- $106.5 million provided to the GTA and Hamilton-Wentworth to assist with new GO Transit capital responsibilities transferred to the municipalities as a result of the realignment of provincial and municipal services.
- This money comes out of the $200 million transportation fund which forms a part of the larger Municipal Capital Operating Restructuring Fund, created to assist municipalities with their new responsibilities.

Ministry Reasons for Not Posting
- This decision is financial and administrative in nature, not environmentally significant, hence no need to post a notice on the Registry or consider MTO's SEV.

ECO Commentary
- The Ministry response is not valid.
- The ministry should consider its SEV and provide opportunities for public comment for all of its decisions relating to public transit.
- This decision is related to MTO's 1997 unposted decision to transfer funding responsibility for public transit to municipalities. The ministry also claimed the financial/administrative exception for that decision.
- The ministry's approach fails to acknowledge the connection between funding for public transit and air quality. Increased emphasis on public transit would help Ontario to achieve its smog reduction targets.

APPENDIX F
Applications for Reviews and Investigations

R0003-R0231, R0233- 241

Interim Ontario Drinking Water Objective for Tritium (MOE)

Review Undertaken — April 1995

The applicants were concerned about MOE's decision to establish an interim Ontario Drinking Water Objective (ODWO) for Tritium for the level of tritium in drinking water at 7000 Bq/L. The Advisory Committee on Environmental Standards (ACES) recommended that tritium levels be set at 100 Bq/L and reduced to 20 Bq/L over the next five years.

Ministry Response
MOE decided to conduct a review (April 4/95), with expected completion within 8 to 10 months. Page 40 of MOE's report to the ECO, dated Feb. 23, 1996, stated that: the review "cannot be completed until a related review is completed at the federal level. This federal review has been delayed until mid-1996, which is beyond the original estimate, due to the complexity of the issue." A chart on p. 41 of the same report states that the outcome is expected "4th quarter 1996."

MOE's report to the ECO in February 1997 stated that the federal review is actively under way but completion was delayed until late spring 1997. Ministry staff indicated in July 1997 that the review would be complete by September 1997. A letter from the Minister of the Environment in August 1997 does not commit to any completion date due to delays in the federal review.

In December 1998, the ministry informed the ECO that "the federal review has recently been completed" and that the ministry is "currently developing options to proceed."

ECO Findings/Comments
The ECO finds the four-year delay in completing this review unacceptable. It is inconsistent with the intent of the *EBR* that the 500 applicants should have to wait so long for a response from MOE.

R0266

Review of regulations for refillable containers for carbonated soft drinks (MOE)

Review Undertaken — September 1995

The applicants wanted Reg. 340 (container regulation) and s.3 of Reg. 357 (refillable containers for soft drinks) under the *EPA* to be replaced with policies that promote effective multi-material recycling programs and packaging stewardship in general. The applicants felt that the refillable quota regulation treats the soft drink industry unfairly, and that the regulations damage the environment through negative impacts on solid waste diversion and energy use.

Ministry Response
MOE agreed in 1995 to review Regs. 340 and 357 in the broader context of overall program streamlining and planned to report its decision by early 1997.

In its 1997 report to the ECO, MOE stated that the ministry had been seeking stakeholder views on alternate approaches for promoting refillable containers through its consultations as part of the MOE Regulatory Review. In addition, MOE stated that it had referred the related issue of funding the Blue Box system and clarifying roles and responsibilities in the province's solid waste management system to the Recycling Council of Ontario (RCO).

In its 1998 report to the ECO, MOE states that it continues to consider stakeholder views on alternate approaches for promoting the use of refillable containers through the ministry's Regulatory Review. MOE also notes that due to the complexity of this issue, the government is still considering all options for managing soft drink and other beverage containers in the province and no decisions have been made on the refillable regulations.

ECO Findings/Comments
The ECO finds the four-year delay in completing this review unacceptable. The applicants are entitled to a response within a reasonable length of time.

(For more information on this topic, see R97015, and the section on Product Stewardship, p. 107)

R0334

Classification of chromium-containing materials as hazardous waste (MOE)

Review Undertaken — February 1996

The applicants requested that Regulation 347 under the *EPA* be reviewed. Under the current regulation, a waste is considered toxic if the total chromium extracted from it during a leachate test exceeds 5 mg/L. The applicants said the legislation should differentiate between toxic and non-toxic forms of chromium. Treating a non-toxic material as hazardous places an unnecessary economic burden on industry.

Ministry Response
MOE decided in 1996 to conduct a review.

In December 1997, MOE told me that proposed changes to a federal Transport Canada regulation will deal with this issue. MOE indicated that in the interests of federal/provincial harmonization work, and to avoid duplication of effort, it was waiting for the federal regulation to be finalized before doing its own review. MOE did not anticipate that the federal work would be complete before early 1998.

In December, 1998, MOE told me that this review would be part of the national harmonization initiative review related to the definition of hazardous waste. The ministry stated that it exercises no control over the timing of this federal initiative.

ECO Findings/Comments
The ECO finds the three-year delay in completing this review unreasonable. The applicants are entitled to a response within a reasonable length of time.

R97010

Review of MNR's decision to withdraw from the administration and enforcement of section 35 of the federal *Fisheries Act* (MNR)

Review Denied — January 1998

The applicants requested a review of MNR's decision to withdraw from reviewing and authorizing works and undertakings that may harmfully alter fish habitat under s.35 of the federal *Fisheries Act*, and to return this responsibility to Department of Fisheries and Oceans (DFO). The applicants noted that MNR, in withdrawing from the activities outlined above, is jettisoning an important mechanism for the protection of fish habitat. They noted that DFO could not possibly assume these duties in the short notice provided by MNR (30 days). They also noted that this decision is contrary to the ministry's SEV, including the section of the SEV that states that people "must have a real voice in the decisions affecting their lives." (Note: MNR posted its decision to withdraw from these responsibilities on the Registry on August 18, 1997, with no opportunity for public comment.)

Ministry Response
MNR decided not to conduct a review. MNR indicates that the decision will not result in potential harm to the environment. It also notes that although a formal public consultation period was not provided before the procedural change was made, MNR did provide several opportunities for input from interested participants.

ECO Findings/Comments
Some of MNR's reasons for not conducting the review were not sufficiently explained. For example, MNR refuted the applicants' claim that MNR's decision would eliminate the protection of fish habitat afforded through the land use planning process, but provided little evidence to support its case. MNR's response also failed to address some of the applicants' concerns about how the decision is inconsistent with MNR's SEV. One of the statements that MNR makes in its response to the application is misleading. MNR states that a review is not needed because members of the public had an opportunity to participate in the policy change, and notes that the ministry provided several opportunities for input from interested participants. MNR did send a letter to selected stakeholders informing them of the ministry's decision, and the rationale for the decision. However, the letter did not provide much information for stakeholders to comment on, and did not indicate that comments were being accepted. Moreover, the general public was not consulted.

R97011

Review of guidelines and procedures under the *Ontario Water Resources Act* as they pertain to the continuous chlorination of the Town of Milton's potable water (MOE)

Review Denied — February 1998

The applicants requested a review of MOE's guidelines that require the continuous chlorination of the Town of Milton's drinking water (which is obtained from groundwater sources). These guidelines require that all municipal water supplies be disinfected (most often using chlorine), even if the source of water is free of contaminants because contaminants can enter water supplies in the distribution system. The source of Milton's water is clean, and until recently was not continuously chlorinated. The applicants noted that scientific studies have shown that exposure to trihalomethanes (THMs), formed when chlorine reacts with organic matter in water, can be linked to increased numbers of certain cancers. They also noted that 71% of Milton residents who voted in the November 1997 municipal election were not in favour of continuous chlorination.

Ministry Response
MOE decided not to conduct a review, noting that it believes the requirements in its policy requiring continuous disinfection of groundwater are appropriate and correct. In support of this decision, MOE notes that:

- the need to disinfect drinking water supplies is well documented;
- studies indicate that chlorine is the most effective disinfectant;
- the possibility of THMs forming as a result of chlorinating Milton's water is low because there is very little organic matter found in groundwater;
- the municipality could apply for a variance from the treatment requirements if it did not want continuous chlorination.

ECO Findings/Comments
Although MOE was justified in denying the application, the ministry should have provided more information in its response to the applicants. MOE should have used this opportunity to provide the applicants with evidence that contamination was occurring in the water distribution system, thus justifying the need to disinfect an otherwise clean source of water. To support the claim that THMs are not a concern with groundwater supplies, MOE should have provided information on the levels of THM found in Milton's water after chlorination began. The ministry should also have acknowledged that the Region of Halton had already applied for a variance from the requirement to continuously chlorinate the water, and that the Region had not fulfilled the terms and conditions necessary for MOE to grant the variance.

R97012

Review of the need for a new regulation under the *Conservation Authorities Act (CAA)* requiring the development of a watershed management plan (MNR)

Review Denied — March 1998

The applicants were concerned about development causing degradation of fish habitat and water quality and quantity in the Farewell and Black Creeks (located in Clarington, a rapidly developing municipality east of Oshawa). They note that a watershed management plan is required to address the cumulative effects of new housing developments in the watershed. The applicants were also concerned about degradation of Second Marsh, a provincially significant wetland into which these creeks flow. They requested a review of the need for a new policy and regulation requiring that a watershed management plan for this area be developed.

Ministry Response
MNR decided not to conduct a review. The ministry decided that a review of the need for a new regulation is not warranted because it is not within MNR's mandate to require that a watershed management plan be undertaken through a regulation under the *CAA*. The preparation of watershed plans is seen to be a locally initiated, voluntary process. In response to the request for a new policy, MNR determined that because of recent direction issued by MNR regarding watershed planning, the potential for harm to the environment did not warrant a review.

ECO Findings/Comments

Although MNR was justified in denying the review on the basis that watershed management planning is a voluntary, locally initiated process, parts of MNR's rationale and the information provided to the applicants were poor. MNR considered the potential for harm to the environment if the review was not undertaken, and concluded that a review of the need for a new policy was not warranted on this basis. However, in a letter sent to the Region of Durham just prior to MNR's denial of this application, MNR notes that the entire Black/Farewell watershed "has suffered a gradual degradation of environmental quality" and suggests that "it would be appropriate to undertake the preparation of ...a watershed plan before any further large scale development is approved." In the interest of transparency, MNR should have acknowledged that the ministry has concerns about the lack of watershed management planning in this area. MNR should also have acknowledged that a watershed management plan was initiated for the Black/Farewell watershed, but that it was stopped because of lack of funds. MNR should have indicated whether or not it provides funding for Conservation Authorities to undertake watershed management planning. To its credit, MNR did send the applicants a copy of a 1997 government report on watershed management planning. MNR should have indicated what progress the ministry has made on some of the initiatives outlined in that document.

R97013

Review of the need for a watershed management plan (MOE)

Review Denied — February 1998

This application concerned development causing degradation of fish habitat and water quality and quantity in the Farewell and Black Creeks (located in Clarington, a rapidly developing municipality east of Oshawa). They note that a watershed management plan is required to address the cumulative effects of new housing developments in the watershed. The applicants were also concerned about degradation of Second Marsh, a provincially significant wetland into which these creeks flow. They requested a review of the need for a new policy and regulation requiring that a watershed management plan for this area be developed.

Ministry Response

MOE decided not to conduct a review. The Ministry indicates that the preparation of watershed management plans is voluntary, and that MOE does not have any authority to require municipalities to undertake watershed planning. MOE's role is to support and encourage locally initiated watershed management planning by providing advice and policy, scientific and technical information on watershed management. The ministry noted that it would provide a technical representative if a locally initiated watershed planning process were reinitiated (the local municipality and conservation authority had begun a watershed management planning process, but had to stop due to lack of funds).

ECO Findings/Comments

MOE's rationale for denying the application was reasonable. In its response to the application, the ministry provided detailed information on local planning requirements for watershed and stormwater management plans. Although it is unlikely that this information will help the applicants get their concerns resolved, the ministry should be commended for providing this supplementary information. MOE did not provide the applicants with a copy of a recent government document on watershed management planning. Although the applicants later received a copy of the document from MNR, MOE should have considered informing the applicants about this document.

R97014

Review of the need for a watershed management plan (MMAH)

Review Denied — March 1998

The applicants were concerned about development causing degradation of fish habitat and water quality and quantity in the Farewell and Black Creeks (located in Clarington, a rapidly developing municipality east of Oshawa). They noted that a watershed management plan is required to address the cumulative effects of development in the watershed. They requested a review of the need for a new policy and regulation requiring that a watershed management plan for this area be developed. Note: This application was forwarded to MMAH before the ministry was prescribed for reviews (it was prescribed April 1, 1998). The ministry was not legally required to respond to this application.

Ministry Response

MMAH decided not to conduct a review, noting that the development of a watershed management plan is a local matter which is generally initiated and coordinated at the municipal level.

ECO Findings/Comments

MMAH was justified in denying the review on the basis that watershed management planning is a voluntary, locally initiated process. The ministry is commended for responding to the application, even though it was not yet prescribed for reviews. Information on what the ministry's role in watershed management planning is would have been helpful to the applicants.

R97015

Review of need for a new regulation under the *Environmental Protection Act* to enable municipalities to offset costs from the Blue Box programs provided to residents (MOE)

Review Denied — March 1998

In December 1997, a large southern Ontario municipality requested a review asking MOE to establish a regulation under the *Environmental Protection Act* to enable municipalities to offset the financial obligations resulting from the regulatory requirements that municipalities provide Blue Box programs to residents. The application also requested that the new regulation provide an incentive to producers and retailers to implement full product stewardship to reduce the environmental effects of packaging waste.

Ministry Response

MOE decided not to conduct a review because the issue was already being reviewed by the Recycling Council of Ontario (RCO). The RCO conducted extensive consultation and developed options for Blue Box funding, which it presented in the spring of 1998.

Six months later, on October 7, 1998, the minister announced a plan to set up the Ontario Waste Diversion Board (OWDB), to be

run by the industries whose products or packages end up in the Blue Box. He called upon these industries to voluntarily contribute $20 million annually to the cost of running the Blue Box program. The minister also announced a $4 million contribution by the LCBO, reflecting the cost of recycling its bottles through the Blue Box program for 1998. The minister also indicated that if industry did not agree to the voluntary funding plan, the government would back it up with a regulatory regime if necessary.

ECO Findings/Comments

MOE's rationale for denying the application was not valid. Although RCO was conducting a review, RCO is not delegated under s.117 of the *EBR* as it might have been.

Despite the minister's announcement, it is not clear what the ministry's next steps are in establishing the waste diversion organization, or how the ministry is encouraging buy-in from the various industries. In 1998, MOE did not establish any timelines for the collection of the $20 million/year. The ministry has not released any details on the type of regulations that might be put in place if the voluntary funding plan does not work

(For more information on this topic, see R0266 and the section on Waste Reduction and Product Stewardship, p. 107)

R98002

Review of existing policies and regulations, and of the need for new policies, Acts and regulations related to hazardous waste (MOE)

Review Denied — April 1998

This application is based on CIELAP's report entitled "Hazardous Waste Management in Ontario," which makes extensive recommendations for the overhaul of Ontario's regulatory framework for managing hazardous wastes. CIELAP's recommendations are intended to: fill the gaps in the available information; ensure the protection of the environment and public health and safety; enhance the public accountability of the province and industry for their activities in this area; and promote hazardous waste reduction and pollution prevention.

(For more on this topic, see section on Hazardous Waste management, p. 170)

Ministry Response

MOE denied the review. The ministry noted that it has either already conducted a review or is currently conducting a review through the regulation reform process of many of the policy areas raised in the application. For policy areas raised in the application that are not being or have not been reviewed, MOE provides a rationale for not reviewing them.

ECO Findings/Comments

The applicants raised nearly 40 specific, well-articulated issues. For a small number of these issues, MOE provided a reasonable rationale for not carrying out a review. But for many other issues, MOE's rationale was weak, and failed to address evidence and concerns raised by the applicants. For example, MOE did not address concerns about gaps in a database of waste generators, poor data on hazardous and liquid industrial wastes at recycling facilities, or inadequate information on discharges of hazardous wastes to sewers.

MOE failed to provide any detailed responses to 24 issues, stating merely that they were "under review, under regulation reform or other initiatives." These responses were inadequate and misleading. ECO discovered that all 24 issues were indeed under review, but that MOE's proposed policy direction would in several cases make the rules less strict, the opposite of what the applicants were requesting. For example the applicants had requested stricter regulation of pesticide container collection depots, including strengthened staff training. But MOE's proposed regulatory changes would set out fewer detailed requirements for staff training.

In other cases where MOE assured the applicants that the issue was "under review," ECO discovered that in fact MOE was proposing to maintain the part of the regulation that applicants wanted changed. For example, the applicants had requested a regulation controlling emissions from hospital incinerators. But MOE's proposed regulatory changes would not affect the existing exemption for hospital incinerators.

MOE's response to the applicants committed to the following actions:

- continue to participate in a federal/provincial working group developing a national pesticide database.
- assist the federal government if it wished to carry out a "clean sweep" program collecting waste pesticides.
- have a report on industrial discharges to surface waters available by September 1998, including total amounts of MISA substances by industrial sector, totals by receiving water body and leading facilities in each sector. But ECO has learned that as of January 1999, no such report was available. A report on 1996 discharges is in preparation, but it does not contain the kind of information promised.

R98003

Review of: the *Conservation Authorities Act (CAA)*; Bill 26; policies related to the sale of public lands; and the need for a new policy to protect a Waterfront Corridor (along Lake Ontario) (MNR)

Review Denied — May 1998

The applicants are concerned about disposition of lands in Pickering by the Toronto and Region Conservation Authority (TRCA). The applicants are concerned that a property transferred from the TRCA to developers in exchange for another parcel of land is going to be developed with low density housing, affecting the ecological function of a natural corridor connecting the Rouge Park and Petticoat Creek Conservation Area.

Related Applications: I98007, 8, R98004, 5

Ministry Response

The ministry provided a detailed rationale for denying the application. MNR stated that the public interest does not warrant review because:

- review of conservation authority policies and procedures is not subject to the *EBR*.
- MNR's policies and procedures for reviewing conservation authority land dispositions are adequate.
- the changes to the *CAA* under Bill 26 related to conservation authority land disposition were administrative in nature.
- issues relating to impact on the waterfront trail and development of "monster homes" are a municipality's responsibility under the *Planning Act*.

ECO Findings/Comments
MNR provided a reasonable explanation of why it could not review some of the matters raised, because they are out of MNR's jurisdiction, or are not subject to the *EBR*.

MNR's reasons for not reviewing its policies and procedures for approving dispositions of conservation authority lands were very weak, merely describing the existing process and implying that it is adequate. MNR's response essentially defended the policies the applicants wanted reviewed. MNR confirmed that the ministry has been encouraging conservation authorities to sell "surplus lands". MNR was revising the policies and procedures for its own reasons at the time it turned down this application. In response to an ECO inquiry, MNR said it would post the proposed revisions to the policies on the Environmental Registry for public comment before they are approved.

R98004

Review of Acts and policies related to the sale of public lands, and the need for a new policy to protect a Waterfront Corridor (along Lake Ontario) (MOE)

Review Denied — April 1998

The applicants are concerned about disposition of lands in Pickering by the Toronto and Region Conservation Authority (TRCA). The applicants are concerned that a property transferred from the TRCA to developers in exchange for another parcel of land is going to be developed with low density housing, affecting the ecological function of a natural corridor connecting the Rouge Park and Petticoat Creek Conservation Area.

Related Applications: I98007,8, R98003,5

Ministry Response
MOE denied the application, saying that the issues for which review was requested were within the jurisdiction of MNR and MMAH.

ECO Findings/Comments
The ministry's rationale was valid.

R98005

Review of: two Official Plans; the *Planning Act*; policies related to the sale of public land; and the need for a new policy to protect a Waterfront Corridor (along Lake Ontario) (MMAH)

Review Denied — May 1998

The applicants are concerned about disposition of lands in Pickering by the Toronto and Region Conservation Authority (TRCA). The applicants are concerned that a property transferred from the TRCA to developers in exchange for another parcel of land is going to be developed with low density housing, affecting the ecological function of a natural corridor connecting the Rouge Park and Petticoat Creek Conservation Area.

The applicants requested a review of the official plans of Durham Region and the Town of Pickering, specifically, of recent rezoning from "major open space" to "low density residential."

Related Applications: I98007,8, R98003,4

Ministry Response
MMAH denied the application for review of the need for a new policy because an existing policy, the Provincial Policy Statement (PPS), came into effect in 1996 after extensive public participation, and must be reviewed by May 2001, under the *Planning Act*. In the meantime, MMAH will allow local municipalities to use their discretion in applying the natural heritage policies contained in the PPS.

MMAH did not respond to the applicants' request for review of the Official Plans of Durham Region and the Town of Pickering, except to say that issues such as the amendment of the Town of Pickering's Official Plan are a matter for local decision.

ECO Findings/Comments
MMAH had valid reasons for deciding not to review the need for a new policy, because it is required under the *Planning Act* to review the Provincial Policy Statement by May 2001. At the time of that review, MMAH will need to evaluate how well municipalities have been implementing the provincial policies, and assess the adequacy of the policies themselves. Applications such as this may assist the ministry in identifying potential problems or issues for review. MMAH was justified in not reviewing the official plans as MMAH has not yet classified its instruments under the *EBR* (official plans are considered to be instruments). The public cannot apply for applications for review of instruments unless they have been classified by the ministry. MMAH is proposing to classify official plans; if the ministry proceeds with this proposal, it will be required to respond to applications for review of official plans in the future.

R98006

Review of the need for a regulation prohibiting approval of a waste disposal site within 8 km of an airport (MMAH)

Review Denied — May 1998

The applicants requested a review of the need for a policy or regulation stating that landfills, waste disposal sites or compost processing facilities should not be allowed within 8 kms of an airport. They were concerned about a pulp sludge processing site proposed in close proximity to the Sault Ste. Marie airport. They feared that birds attracted by the compost would create hazards for aircraft taking off and landing, and that methods of controlling bird populations (insecticides and herbicides) could be harmful to the environment.

Ministry Response
MMAH denied the application. It noted that the Provincial Policy Statement (PPS), which came into effect in 1996, includes policies that specifically address land use compatibility issues near airports. Municipal planning authorities in Ontario must "have regard to" the PPS when planning land use.

ECO Findings/Comments
The ministry's rationale for denying the application was not very strong. Although the PPS does include guidelines that could be interpreted to address the siting of waste disposal sites near airports, municipalities are not obliged to adhere to these guidelines. MMAH assured the applicants that municipalities are responsible for "having regard to" the PPS, but didn't explain whether anyone tracks how well municipalities are doing this, or what the consequences are when municipalities fail to do this.

ECO's review of how MMAH monitors municipal land use planning decisions has found that MMAH does not require municipalities to report on their implementation of the PPS on Land Use. Also, MMAH is only beginning to consider ways that it might be able to monitor municipal implementation of the Provincial Policy Statement. See the section on Urban Sustainability for a full discussion of these issues, p. 84.

This application also highlights public concerns about how pulp mill wastes are processed and spread onto agricultural lands. This topic is addressed in more detail in the discussion of recycling of pulp and paper mill wastes, p. 179.

R98007

Review of the Certificate of Approval (C of A) for a waste disposal site on Blackwell Road in Sarnia (MOE)

Review Denied — June 1998

A multiplicity of concerns cited by the applicants can be summarized as follows:

- Inadequate protection regarding visual impact, noise impact, vibration, ground water contamination by the leachate, dust, odour.
- The claim that the final fill rate, being greater than the original proposal, required a hearing per *EPA* ss.30(1) and 32(1).
- The claim that the final approval was based on false and misleading information and maps.

Related Application: I98011

Ministry Response
The ministry provided a very lengthy and detailed rationale for denying the application stating that two different Cs of A were placed on the Registry as required by *EBR* s.22, thus enabling third parties to apply for leave to appeal. However, no third party applied for leave to appeal either instrument. In addition, no new information has become available that would warrant reviews of the decisions.

The ministry stated that the decisions were made in a manner consistent with the intent and purpose of Part II of the *EBR* and that they are recent decisions. Therefore, the public interest does not warrant a review as set out in *EBR* s.68(1).

The applicant was not satisfied with the ministry response, citing excessive dependence on the company's report to the ministry.

ECO Findings/Comments
The ministry rationale for denying this application was valid. The written response to the applicant was detailed, to the point and well-organized. However, the ministry failed to inform the applicants that there was a proposed amendment to the Certificate of Approval for this site to increase the service area of the landfill, with an opportunity to comment.

R98008

Review of a C of A issued to Kapush Gravel Basin Inc. for a waste disposal site in the District of Thunder Bay (MOE)

Review Denied — August 1998

The applicants requested a review of a 1989 C of A for a landfill site in Thunder Bay. The applicants allege that the operators have been able to increase the capacity of the site without environmental review, because the C of A does not set a limit on the final capacity of the site. The applicants allege that the potential for environmental harm, particularly from the leaching of toxins from wood wastes, has increased because the operators have been overfilling the landfill site.

Ministry Response
The ministry gave a number of reasons for denying the application, including:

- There is no evidence of potential for harm to the environment, and the existing groundwater and surface water monitoring program will detect any contamination.
- Ministry review of annual water monitoring data will ensure that the site is operated in compliance with the C of A and ministry policies and guidelines.
- The site is in compliance with the C of A.
- An Operations Plan gives a final volumetric capacity which is used as the approved capacity of the site, regardless of the conversion factors used.
- The site is being filled within the approved footprint and final contours.
- The density and tonnage figures used in the application and annual reports are not used to calculate the approved capacity of the site but to estimate the life span of the site so that owner and MOE can estimate when the final Closure Plan for the site needs to be implemented.
- The site has and will continue to be inspected by MOE to ensure compliance with the C of A.

ECO Findings/Comments
The ministry's reasons for denying this review were largely irrelevant and misleading. For example, the ministry said that the site is in compliance with its C of A, but side-stepped the applicants' concern that the 1989 C of A itself is deficient in not specifying the final site capacity. The ministry admits that new landfill approvals would include a volumetric limit on capacity.

The ministry also failed to address the applicants' concern that the operator has increased the estimated capacity of the landfill in its 1988 Operating Plan, approved by reference in the C of A, without ministry approval or amendment to the C of A. The ministry also failed to inform the applicants that the C of A was about to be reviewed at the request of the company, and that the applicants could review the amendment proposal and comment on the proposal posted on the Environmental Registry. The ministry did not address the applicants' concerns about the lack of a limit on the final site capacity in their review of the C of A.

R98009

Need for a new regulation under the *Aggregate Resources Act* designating Armour Township, Parry Sound (MNR)

Review Denied — September 1998

The applicants requested a review of the need to extend the geographical coverage of the *Aggregate Resources Act (ARA)* to include Armour Township, in the Parry Sound District of MNR. Currently the *ARA* covers most of southern Ontario, as well as recently designated areas around Sudbury and Sault Ste Marie. The applicants allege that unregulated aggregate extraction in their municipality is causing environmental harm, including damage to neighbouring properties, erosion, fish habitat destruction and failure to remediate gravel pits.

If the aggregate operations in the municipality were designated under the *ARA*, it would be MNR, and not the local municipal council, regulating gravel pits. The applicants contend that under MNR control, new pits would get more scrutiny. In addition, all pits would be monitored and rehabilitation plans would be required.

Ministry Response

The ministry decided not to carry out a review. The ministry gave detailed reasons:

- The ministry recently reviewed its strategy for designation of areas under the *ARA*, and decided that "all significant aggregate resource areas of Ontario should be designated."
- The ministry is phasing in coverage in areas adjacent to the area already covered by the *ARA,* designating new areas "sequentially by region and preferentially adjacent to existing designated areas."
- It is unlikely that designation under the ARA would resolve all of the applicants' concerns, since existing pits would be "grandfathered," exempting them from public notification and consultation requirements, and then issued a licence upon designation.
- There is some measure of environmental and community protection under existing municipal regulatory controls.
- Protection from noise and other contaminants is provided through other provincial legislation, such as the *Environmental Protection Act* and the *Ontario Water Resources Act.*
- The applicants raise a number of concerns outside the jurisdiction and mandate of the *ARA*, and MNR advised them to contact the federal Department of Fisheries and Oceans with their concerns about fish habitat.

ECO Findings/Comments

MNR gave weak reasons for denying the application. For example, MNR's recent review of its strategy for designation of areas under the *ARA* "confirms the provincial government's long-standing position that all significant aggregate resource areas of Ontario should be designated under *ARA.*" This essentially confirms the need for the review. MNR says that the reason it hasn't accomplished this objective is because of the cost, but that the financial burden on the government has lessened with recent amendments to the Act.

MNR describes how it prioritizes which parts of province should be designated, but doesn't conclude that this particular township is a low priority. Nor does MNR give the applicants any idea when this township will be evaluated for potential designation.

MNR says that designation wouldn't resolve all of the applicants' concerns about existing pits, but then says that designation would improve the situation, even for existing pits, by requiring site plans (including rehabilitation measures), and monitoring for compliance with the regulatory requirements and operational standards under the *ARA.*

MNR should have used the ministry's existing criteria to evaluate the priority for designating this township under the *ARA.*

To its credit, MNR did provide a detailed response to the applicants, and suggested how they could address concerns about fish habitat.

R98010

Application for Review of a Provisional C of A for Three County Recycling and Composting (MOE)

Review Denied — September 1998

Neighbours of the Three County Recycling and Composting facility in Aylmer, Ontario, allege that they are subjected to odours and debris from the facility. The applicants requested a review, but were not specific about what they wanted reviewed. The ECO and MOE interpreted the application to be requesting a review of the certificate of approval for the facility, issued on March 3, 1997.

Related Application: I98024

Ministry Response

MOE decided not to carry out a review because the C of A was issued in 1997, and the applicants did not raise any new information that was not considered at the time the decision was made.

ECO Findings/Comments

MOE was justified in denying this application, particularly as the application was not clear. This application does raise the issue of the impacts of recycling and composting facilities on a community. If MOE adopts a Standardized Approvals Regulation (SAR) for recycling and composting facilities, citizens may be denied the opportunities they had in this case: (1) to receive notice on the Registry of amendments to a C of A; (2) to comment on a ministry's decision to issue a C of A; (3) to participate in an appeal of the C of A; and (4) to request a review of the C of A.

I97006

Alleged *EPA* and *OWRA* contraventions by Ontario Hydro in allowing discharges of contaminants including copper, tin, zinc, lead and arsenic to water due to erosion/corrosion of condenser tubes at nuclear generating stations (MOE)

Investigation Completed — March 1998

This application focused on discharges into Lake Ontario at the Pickering A and Pickering B Stations since 1981, and the alleged provision of false monitoring data in violation of MISA regulatory requirements.

I97008

Alleged *EPA* and *OWRA* contraventions by Ontario Hydro in allowing discharges to water due to erosion/corrosion of condenser tubes at nuclear generating stations (MOE)

Investigation Completed — March 1998

This application focused on discharges into Lake Ontario, Lake Erie, and the St. Clair River since the 1970s at the Pickering, Lakeview, Nanticoke, Lambton and Bruce A power plants, and the alleged provision of false information to MOE.

I97012

Alleged *EPA* and *OWRA* contraventions by Ontario Hydro in allowing discharges to water due to erosion/corrosion of condenser tubes at nuclear generating stations (MOE)

Investigation Denied — October 1997

This application focused on discharges into Lake Ontario at the Pickering A and Pickering B Stations since 1981, and the alleged provision of false monitoring data in violation of MISA regulatory requirements.

Ministry Response

The ministry reports can be summarized as follows:

- Ontario Hydro became aware of the heavy metal losses from its condenser tubes in 1989, but chose not to disclose the problem to MOE. This decision is documented in internal correspondence at Ontario Hydro. Hydro properly discharged its monitoring requirements under the MISA regulations. This reporting, however, was based on a policy that it developed with MOE which allowed exclusion of condenser cooling waters for assessment. The rationale for this policy was a "recognition that an economically achievable technology for abatement was not available... (and) it was anticipated that the very high dilution... would not allow any detection of contaminants introduced by site operations."
- Despite the exclusion of condenser cooling waters from MISA reporting requirements, data reported to MOE by Ontario Hydro in 1990 and 1991 included significant concentrations of copper at Monitoring Point 2400. The MOE report stated that "copper concentrations in the first six monthly samples were found to be two orders of magnitude higher than the last six." Despite supporting toxicity information, MOE dismissed the first six readings as "flawed" possibly due to "inappropriate sampling."
- In response to the specific allegations in the applications, MOE did not recommend prosecution of Ontario Hydro:
- for discharge of contaminants, because of lack of evidence regarding adverse effect
- for provision of false information, because the failure to disclose to MOE the erosion/corrosion problems associated with the admiralty brass condenser units does not strictly constitute an offence under the *EPA*, as the monitoring regulation does not specifically require it.
- for failing to comply with MISA regulatory requirements, because condenser cooling waters are not subject to the regulation (according to the policy developed between MOE and Ontario Hydro).

ECO Findings/Comments

The MOE investigation reports on I97006 and I97008 also covered the allegations made in I97012 so that effectively all of the allegations were investigated. The ministry reports were complete and addressed each allegation individually.

The ministry reports reveal that a number of failures resulted in the release of excessive levels of copper (and probably other metals) to Lake Ontario (and probably other waterbodies) at the Pickering B (and probably other nuclear generating) stations. Ontario Hydro and MOE both bear some responsibility in this regard. Ontario Hydro should have recognized its responsibility to inform the ministry in 1989 once it recognized the problem with the admiralty brass condensers, despite the fact that there was no regulatory requirement for them to do so. For its part, MOE staff should have recognized that a problem existed, based on high concentrations of copper in six successive samples taken at the Pickering B Nuclear Generating Station (Monitoring Point 2400) in 1990 and 1991. Certainly, had Ontario Hydro provided information about the condenser corrosion/ erosion problem to MOE in 1989, it is unlikely that MOE would have dismissed the high copper concentration data reported by Ontario Hydro in 1990 and 1991 as "flawed."

The relationship between Ontario Hydro and MOE at the time was characterized by poor communication between the agencies, and a lack of enforcement by MOE . An expert panel retained by Hydro in July 1997 to review its nuclear operations pointed out that "the relationship with MOE... was to tell MOE the minimum required." Since 1997, Ontario Hydro has reformed its management structure and implemented many of the recommendations of the expert panel. Another positive development was the transfer of responsibility for Ontario Hydro from MOE to the newly established Ministry of Energy, Science and Technology. For MOE, as a regulator, an arm's length relationship with Hydro is more appropriate than the direct responsibility that obtained between 1995 and 1997.

In a strict legal sense, according to the MOE analysis, Ontario Hydro did not commit an offence. However, the internal decision at Ontario Hydro not to volunteer information regarding the corrosion/erosion of the admiralty brass condensers, a problem of which it became aware in 1989, and which affected all installations utilizing the admiralty brass condensers, cannot be justified. The panel of experts found that Hydro exercised "poor judgement" and concluded that "there does not appear to be a strong environmental ethic within Ontario Hydro's nuclear business."

The ECO 1997 annual report credited Ontario Hydro with progress in replacing the brass condensers, and in addressing the "gaps and inadequacies in (its) management system in the areas of environmental accountability and awareness." The 1997 report also noted that MOE reacted quickly once the environmental problems at Ontario Hydro came to light.

I97007

Alleged contraventions of the federal *Fisheries Act* by Ontario Hydro (see I97008) (MNR)

I97009

Alleged violations of the federal *Fisheries Act* by Ontario Hydro (see I97006) (MNR)

I97013

Alleged contraventions of the federal *Fisheries Act* by Ontario Hydro (see I97012) (MNR)

Investigation Due — 26-Feb-99

Violations of the federal *Fisheries Act* related to discharges described in Applications I97008, I97006, I97012.

Ministry Response
MNR undertook a single investigation in response to these three applications with an estimated completion date in early 1999.

ECO Findings/Comments
The ECO will review these applications once the MNR investigation is complete.

I97016

Alleged contravention of *EPA* s.14 related to a plastic recycler in Amherstburg (MOE)

Investigation Completed — January 1998

The applicants allege that s. 14 of the *EPA* is being violated by a plastics recycling company (Enviro-Tech) in Amherstburg (near Windsor). The company is located in a residential area, and the applicants, who are local residents, are concerned about flies, odour, noise, fire, and contamination of sewage from process waste from the plant. (Note: Because the company accepts only one type of material—plastic—it is exempted from the waste regulations.)

Ministry Response
MOE decided to investigate. Through the investigation, MOE determined that there was no evidence of the contraventions alleged in the application. As a result, the ministry is not taking any action.

ECO Findings/Comments
The ministry's response was reasonable. MOE staff inspected the site and found no evidence of contraventions. The investigation report, although brief, clearly explains MOE's investigation of the allegations. The ministry's ability to control the operation of this facility is limited, since the facility, as a plastic recycler is not required to obtain a C of A under the provisions of Regulation 347 and is subject only to minimal requirements.

(For more information on this topic, see the section on Hazardous Waste management, p. 170)

I97018

Alleged contravention of the *EPA* and *OWRA* related to placement of fill adjacent to watercourses (MOE)

Investigation Denied — February 1998

The applicants alleged that fill received at a site on Solina Road in Clarington did not meet MOE's guidelines for allowable levels of contaminants. They were concerned about potential contamination of groundwater from this fill. With their application, they submitted numerous pieces of evidence, including results of soil testing on the site, and a petition from local residents. The applicants were also concerned about other unmanaged waste sites expanding into a provincially significant wetland complex.

Related Application: I98019

Ministry Response
MOE decided not to conduct an investigation as the matters outlined in the application had previously been investigated. MOE notes that the fill deposited at the site was from a former General Motors property that was being decommissioned (under MOE's 1989 Soil Cleanup Guidelines). Although most of the soil placed at the Clarington site met the 1989 Guidelines for residential properties, nine truckloads of fill that exceeded these guidelines were mistakenly placed at the site (because of incorrect information supplied by the property owner about the zoning for the site). The soils were incorporated into a roadway on the site, making it impossible later to isolate and remove the more heavily contaminated soils. MOE notes that its Investigation and Enforcement Branch (IEB) and the MOE District office conducted investigations into the placement of the fill material, and concluded that neither the *EPA* nor the *OWRA* were contravened.

ECO Findings/Comments
MOE provided a thorough response. It outlined the applicants' allegations clearly and provided evidence from previous investigations that showed that contraventions had not occured. MOE was justified in denying this application, as both the IEB and the District office had previously investigated this issue. It is clear that the applicants had a legitimate concern, as MOE acknowledges that nine truckloads of soil deposited at the site contained lead levels greatly exceeding the Guidelines. Under current regulations and Guidelines, however, no cleanup or other action is required. Despite the detail in the ministry's response, some issues remain unclear. For example, MOE did not explain why its sampling of the site revealed levels of lead within the Guidelines, while samples collected by the applicants showed levels that exceeded the Guidelines. MOE also should have explained to the applicants that the ministry is proposing to develop new criteria for managing fill, as an amendment to Reg. 347.

I97019

Alleged contravention of fill regulations under the *Conservation Authorities Act* and violation of the federal *Fisheries Act* (MNR)

Investigation Completed — May 1998

The applicants allege that owners of a property in Clarington failed to apply for a permit prior to receiving fill, as required by the local conservation authority. They allege that the fill contained contaminants and was placed next to a cold water creek. They also allege that other waste sites are not managed and are expanding into a provincially significant wetland complex.

Related Application: I97018

Ministry Response
MNR conducted an investigation, and determined that the work conducted did not contravene the federal *Fisheries Act*, as the filling had not impacted on any natural watercourse.

ECO Findings/Comments
MNR's investigation failed to address the allegations about contraventions of the *Conservation Authorities Act*, and the applicants' concerns about other waste sites expanding into provincially significant wetlands. Although MNR did investigate allegations of violations of the federal *Fisheries Act* , its report on the investigation was very brief. MNR simply stated that the work conducted did not contravene the *Fisheries Act*, as "the filling had not impacted on any natural watercourse." MNR provided no detail on how it reached this conclusion, or whether it considered the possibility of contaminants leaching from the fill into the nearby creek.

In correspondence with the ECO, MNR expresses regret for failing to include details of this investigation in the summary provided to the applicants. The ministry notes that changes introduced by MNR in July 1998 for the processing of applications will help ensure that the proper level of detail is provided to applicants.

I98003

Alleged contravention of the *OWRA*, the *EPA* and O. Reg 358 under the *EPA* resulting from an illegal discharge of 22 million litres of raw sewage into a creek (MOE)

Investigation Denied — May 1998

The applicants believe that on August 15, 1997, the sewage system operated by York Region discharged more than 22 million litres of raw sewage into German Mills Creek (a tributary of the East Don River in Thornhill, just north of Toronto). This discharge, which was the result of a power failure that halted pumping operations, resulted in violations of the *OWRA*, the *EPA* and O. Reg. 358. The spill resulted in high bacteria levels near the mouth of the Don River in Lake Ontario. The applicants claim that York Region failed to have reasonable or adequate backup systems to deal with the power failure. They argue that York Region has no adequate system to deal with sewage disposal during wet weather conditions, and such a system must be put in place.

Related Application: I98004

Ministry Response
MOE decided not to conduct an *EBR* investigation, as the allegations raised in the application were already under investigation by the ministry. MOE indicated that once the non-*EBR* investigation was completed (March 1999), it would provide a copy of the results to the applicants.

ECO Findings/Comments
The ECO will review this application in 1999.

I98004

Alleged contravention of the s. 36 of the federal *Fisheries Act* resulting from an illegal discharge of 22 million litres of raw sewage into a creek (MNR)

Investigation Completed — June 1998

The applicants believe that on August 15, 1997, the sewage system operated by York Region discharged more than 22 million litres of raw sewage into German Mills Creek (a tributary of the East Don River in Thornhill, just north of Toronto). This discharge, which was the result of a power failure that halted pumping operations, resulted in violations of s.36 of the federal *Fisheries Act*. The spill resulted in high bacteria levels near the mouth of the Don River in Lake Ontario. The applicants claim that York Region failed to have reasonable or adequate backup systems to deal with the power failure. They argue that York Region has no adequate system to deal with sewage disposal during wet weather conditions, and such a system must be put in place.

Related Application: I98003

Ministry Response
MNR conducted an investigation. MNR notes that due to the fact that the ministry was not notified of the alleged contravention until five months after the spill, the ministry found it very difficult to prove the presence of a deleterious substance (the deposit of which is prohibited by s.36 of the federal *Fisheries Act).* MNR notes that MOE was not able to provide MNR with additional evidence to assist in the investigation, and indicates that MNR should have been notified of the spill immediately. Because of the lack of evidence, MNR decided not to pursue the investigation further.

ECO Findings/Comments
MNR's rationale for discontinuing its investigation (due to lack of information) was weak. MNR did not explain why MOE was unable to provide MNR with further information on the spill. Since MOE is conducting its own investigation of the spill, it must have some evidence. MNR also does not explain whether it tried to obtain information from York Region or Metro, both of which (according to a newspaper article) tested water following the spill. MNR staff indicate that MOE usually takes the lead where spills are involved, as MOE has more expertise in dealing with spills and testing water. However, MNR did not explain this in its investigation report.

I98005

Alleged contravention of *EPA* s.14 from a wood-burning furnace (MOE)

Investigation Denied — May 1998

The applicants allege that noxious fumes, smoke and noise being produced by a neighbour's wood-burning furnace is interfering with normal use of the applicant's property. They note that numerous attempts to resolve the problem with the neighbour, and also through municipal, county and provincial governments over a four-year period, have been ineffective.

Ministry Response
MOE decided not to conduct an investigation claiming that it does not have jurisdiction to respond to complaints of smoke and odour related to the operation of wood stoves and that these complaints should be handled by the local municipality or fire department.

The ministry response to the applicants was provided 52 days after it was due.

ECO Findings/Comments
The ministry was unable to rationalize its claim that it does not have jurisdiction over the issues in the application with the requirements of s.14 of the *Environmental Protection Act.*

The ECO believes that MOE makes decisions about undertaking or denying applications on the basis of an internal document entitled: "Protocol for Response to Incident Reports" which appears to contradict *EPA* s.14. The ministry has refused to provide a copy of the internal document to the ECO in order to allow for a better understanding of the basis of the decision to deny this application.

During the ECO follow-up, MOE staff indicated that MOE would conduct an investigation if the applicant's physician can demonstrate "adverse effect" to the Medical Officer of Health. A new Approvals Exemption Regulation (AER) passed by MOE in October 1998 exempts woodburning stoves from having to be approved under the *EPA*. However, future applicants would still be able to request an investigation if provisions of the AER are contravened. The AER indicates that it is acceptable to burn natural gas, untreated wood or manufactured fire logs in these stoves.

I98006

Alleged contraventions of the *EPA* from noise and vibration from a Ford plant in Windsor (MOE)

Investigation Completed — August 1998

The applicants, who live in the vicinity of the "Ford Power House," allege that vibration caused by this operation has caused structural damage to many homes in the area and health effects to themselves, in violation of *EPA* s.14(1). One of the applicants (Applicant 1) resides 100 metres east of the site.

The applicants support claims of health effects with a physician's letter stating that symptoms noted by Applicant 1 could be the result of vibration. A number of studies by MOE and by external consultants, including noise specialists and an ergonomist, confirm that low level vibration at the home of Applicant 1 result from the operation of compressors at the Ford site but find that that these are "below the criterion of acceptability" and "below ISO criteria dealing with human response to building vibration." MOE acknowledges an annnoyance factor due to the low level vibration, but does not concede "adverse effect." Hence this application.

Ministry Response
The ministry carried out the investigation and determined that no further investigation into this matter is warranted. As rationale, the ministry cited the following:

- MOE conduced vibration tests in June 1997 showing vibration levels below perceptible limits and well below limits that the ministry considered capable of causing structural damage. The applicant alleged that Ford curtailed operations during these tests.
- MOE conducted new tests in April 1998 with similar results and similar allegations.
- MOE conducted additional tests in June 1998 in response to the investigation application and stationed ministry personnel on the Ford site to ensure that the company was operating at production levels. Different production scenarios were tested. Ford conducted tests in parallel with MOE and confirmed that vibration was below perceptible limits.

In November 1998, one of the applicants initiated a civil action against Ford and the City of Windsor.

ECO Findings/Comments
The ministry's response was reasonable. MOE has dealt with the concerns of the applicant in a thorough and careful manner. A number of studies failed to demonstrate deleterious levels of noise and vibration. No corroborating evidence was presented to show that Ford operations were curtailed during these investigations. MOE sent the applicants a copy of the ministry's technical report of the *EBR* investigation.

This case highlights the land use conflict issue. Despite the existence of ministry guidelines for minimum separation distances between residential and industrial land uses, MOE no longer routinely reviews municipal land use plans; thus, the avoidance of similar problems is not guaranteed.

I98007

Alleged contravention of the *Conservation Authorities Act (CAA)* and the *Public Lands Act (PLA)* through sale of land (MNR)

Investigation Denied — May 1998

The applicants allege that the *CAA* and the *PLA* were contravened when the Toronto and Region Conservation Authority (TRCA) disposed of property in Pickering. The applicants note that this property represents the only natural corridor connecting the Rouge Park and Petticoat Creek Conservation Area.

Related Applications: I98008, R98003,4,5

Ministry Response
MNR decided not to conduct an investigation because the allegations are not possible offences under either the CAA or PLA, and because the alleged contravention is not likely to cause harm to the environment. Further, MNR said that the application for disposition by the TRCA was currently being reviewed in accordance with MNR's "Policies and Procedures for Disposition of Conservation Authority Property."

ECO Findings/Comments
The ministry's decision not to investigate was reasonable, given that the allegations raised in the application could not be considered offences under either Act.

I98008

Alleged contravention of the *Environmental Assessment Act* and the *Environmental Protection Act* through sale of land (MOE)

Investigation Denied — April 1998

The applicants allege that the *EAA* and the *EPA* were contravened when the Toronto and Region Conservation Authority disposed of property in Pickering. The applicants note that this property represents the only natural corridor connecting the Rouge Park and Petticoat Creek Conservation Area.

Related Applications: I98007, R98003,4,5

Ministry Response
MOE decided not to conduct an investigation, noting that the application does not indicate that a contravention of either the *EAA* or the *EPA* had occurred.

ECO Findings/Comments
The ministry's reasons for not investigating are reasonable. When requesting an investigation, applicants must provide as much detail as possible about how an Act, regulation or instrument may have been contravened.

I98009

Alleged contravention of the *Environmental Assessment Act* by not complying with Conditions 23 and 77 of the Timber Class Environmental Assessment (MOE)

Investigation Due — 15-Mar-99

The applicants allege that MNR is issuing Sustainable Forest Licences (SFLs) which contravene Conditions 77 and 23 of the Timber Class EA. Condition 77 requires MNR to conduct negotiations with Aboriginal peoples whose communities are situated within a forest management unit in order to identify and implement ways of achieving a more equal participation by Aboriginal peoples in the benefits provided through forest management planning. The applicants are specifically concerned about the Clergue SFL (issued Jan 21'98) and the Northshore Forest SFL (pending). They also note that these SFLs are being issued in contravention of the Forest Management Plan for the Mississagi Crown Management Unit.

Ministry Response
MOE decided to investigate and expects to complete the investigation by March 15, 1999.

ECO Findings/Comments
The ECO will review this application in 1999.

I98010

Alleged contravention of the *Environmental Assessment Act*, by not implementing the Terms and Conditions of the Timber Class Environmental Assessment (MOE)

Investigation Due — 15-Mar-99

The applicants allege that MNR is not following the terms and conditions of the Timber Class EA. The applicants provide, as examples, three terms and conditions that MNR has allegedly contravened:

- The requirement for MNR to make annual reports on forest management to the Legislature (Condition #82 and Appendix 20)
- The obligation to develop a Roadless Wilderness Policy (Condition #106)
- The obligation to conduct negotiations with Aboriginal peoples on various matters, including timber licensing (Condition #77)

Ministry Response
MOE decided to investigate and expects to complete the investigation by March 15, 1999.

ECO Findings/Comments
The ECO will review this application in 1999.

I98011

Alleged contravention of *EPA* by allowing expansion of a waste disposal site in Sarnia (MOE)

Investigation Denied — June 1998

The applicants alleged violations of Sections 30(1) and 32(1) of the *EPA* and several conditions of the Certificate of Approval issued to a waste disposal site in Sarnia.

Section 30(1) states that when the Director ascertains that a landfill will receive waste which is the equivalent of that associated with 1500 persons or more, (s)he shall, before granting an approval, require the Environmental Assessment Board to hold a hearing.

Section 32(1) states that when Section 30(1) does not apply, then the Director may require the Environmental Assessment Board to hold a hearing.

The applicants cited a large number of alleged violations of conditions of the C of A, including visual, noise and odour nuisance impacts.

Related Application: R98007

Ministry Response
MOE denied the application. As rationale, it noted that only s.32(1) applies to this application, and that the Director of Approvals used his discretion not to hold a hearing. With regard to alleged violations of conditions of the C of A, MOE noted that all incidents noted in the *EBR* application have been investigated or are under investigation, and that therefore an *EBR* investigation is not required. The ministry also noted that one incident was before the courts as a result of the ministry issuing a ticket which was being challenged by the company.

From follow-up in January 1999, ECO learned that charges against the company were dismissed by the court on a technicality. There were no outstanding charges.

ECO Findings/Comments
There is no indication that the ministry neglected to discharge its mandate with respect to monitoring fulfilment and enforcing the conditions of the C of A. The ministry, however, should have provided more timely information to the applicants regarding the results of internal investigations, as it committed to do in its response to the applicants.

The ministry should also have informed the applicant that a proposed amendment to the C of A to expand the service area to include non-hazardous solid waste from the Province of Ontario was on the Registry with an opportunity to comment.

198012

Alleged contravention of the *CFSA*, the *PLA*; and O.Reg. 453/96 through construction of a road (MNR)

Investigation Completed — August 1998

The applicants allege that Domtar contravened the *Crown Forest Sustainability Act (CFSA)* and the *Public Lands Act (PLA)* and its regulations by building approximately 11 kms of roads on Crown land near Pukaskwa National Park. They note these roads were not included in a forest management plan, forest operations prescription or work schedule approved by MNR, as required by the *CFSA*. They also note that the roads were constructed in the absence of a work permit or instrument under the *PLA*.

Related Application: I98013

Ministry Response
MNR was already conducting an investigation under the *CFSA* when this *EBR* application was submitted. MNR continued the ongoing investigation. Prior to the *EBR* application, MNR had already determined that the company had contravened the *CFSA*, seized the forest resources involved in the infractions and issued a Stop Work Order. MNR later decided to fine the company $73,000 - an amount equal to the value of the timber extracted for the road. MNR decided that a fine was more appropriate than prosecution in this case because:

- This is the first infraction of this type by the company in the previous three years.
- Most of the areas where the contraventions occurred are being considered for timber extraction in the future.
- The environmental impacts of the road clearing activities are similar to those commonly authorized in forest management plans, and have been mitigated by following recommended construction practices.

MNR determined that the road construction did not contravene the *Public Lands Act*, as work permits under the *PLA* are not required for forest operations covered by the *CFSA*.

ECO Findings/Comments
MNR's investigation was thorough, and resulted in a substantial fine being imposed on the company.

198013

Alleged contravention of s.5(4), 13(3) and 38 of the *EAA* through construction of a road (MOE)

Investigation Denied — June 1998

The applicants allege that Domtar contravened the *Environmental Assessment Act (EAA)* by building a road on Crown land near Pukaskwa National Park without an approved Forest Management Plan. They note that all forest operations, including road construction and use, are subject to approval under a detailed forest management planning process outlined in the Timber Class EA, and that the roads in question were not approved under this process.

Related Application: I98012

Ministry Response
MOE decided not to investigate because MNR was conducting an investigation.

ECO Findings/Comments
MOE's decision not to investigate was valid. MOE, had it decided to investigate, would have been looking at the same allegations as MNR, as conducting forest operations outside of an approved forest management plan is also a contravention of the Timber Class EA, which in turn would be considered an offence under section 38 of the *Environmental Assessment Act*.

MNR was investigating the issues raised in the application, and fined the company for violating the CFSA.

I98014

Alleged contravention of the *CFSA*, the *PLA* and the federal *Fisheries Act* through forestry activities in the Algoma Forest Management Unit (MNR)

Investigation Completed — November 1998

The applicants allege that forest operations were carried out in Sherratt Township in contravention of the *CFSA*, the *PLA* and the federal *Fisheries Act*. The applicants provide evidence that organic debris, soil and silt have been deposited in sensitive headwater watercourses of the Batchawana River as a result of timber harvesting and road constuction. They also allege that skid trails have been constructed close to sensitive headwater watercourses, and in one instance, through a no-cut buffer, within protected Areas of Concern (AOCs).

Ministry Response
MNR's investigation confirmed most of the observations of the applicants, and also acknowledged that several contraventions had occurred. MNR staff recommended enforcement action at one of the four sites, and recommended policy/procedural changes to address problems found at the other three sites. The recommendations included clearer guidelines to protect streams, written documentation whenever MNR approved driving logging machines through streams, use of flagging tape or paint to mark areas of concern and training for MNR staff and industry on environmental guidelines for road access and water crossings.

I98016

Alleged contravention of the CFSA through forestry activities in the Algoma Forest Management Unit (MNR)

Investigation Completed — November 1998

The applicants allege that forest operations were carried out in Scriven Township in contravention of the *CFSA*. The applicants provide evidence that 60 m of a 120 m buffer was harvested. They also allege that a small watercourse has been filled with logging slash, and another watercourse was left without a 3m riparian reserve.

Ministry Response
MNR's investigation confirmed the evidence described by the applicants, and also acknowledged that several contraventions had occurred. MNR staff recommended enforcement action at two of the three sites, and recommended policy/procedural changes to address problems found at the other site. The recommendations included clearer guidelines to protect streams, and training for MNR staff and industry on environmental guidelines for road access and water crossings.

I98018

Alleged contravention of the *CFSA*, the *PLA* and the federal *Fisheries Act* through forestry activities in the Algoma Forest Management Unit (MNR)

Investigation Completed — November 1998

See also the discussion of this application on p. 185.

The applicants allege that forest operations were carried out in Schembri Township in contravention of the *CFSA*, the *PLA* and the federal *Fisheries Act*. The applicants provide evidence that organic debris, soil and silt have been deposited in a sensitive watercourse as a result of timber harvesting and road constuction. They also allege that skid trails have been constructed within protected AOCs in close proximity to sensitive watercourses and, in one instance, through the watercourse.

Ministry Response
MNR's investigation confirmed that logging equipment had crossed a stream, but determined that MNR had given verbal approval. MNR recommended written documentation of such approvals. MNR also recommended that an erosion problem at one site should immediately be remedied. The MNR investigation team found no garbage at another site, since it had been removed by the contractor. At a third site, MNR concluded that an AOC had not been harvested, because the applicants incorrectly measured from a standing pond rather than from the stream edge.

ECO Findings/Comments for I98014, I98016 and I98018
These three investigations raise questions about the adequacy of existing forestry inspection/compliance procedures. Some of the alleged infractions had happened in the summers of 1993, 1994 and 1995, but had not been previously reported. The MNR investigation report did not explain what the normal inspection/compliance procedure has been for these sites, or make any reference to other inspections or audits, either past or future. It is not clear how or when any of these forestry operations would be inspected by MNR staff under routine circumstances.

These investigations also highlight the inadequacy of the current limitation periods for enforcing violations of Ontario forestry laws. The MNR investigation team found that the *Public Lands Act* had been contravened at two sites (Sherratt site #4, Scriven site#2), but they could not enforce the Act because the 6-month limitation period had expired. Given the much reduced staffing of MNR and the focus on industry self-monitoring, it is unlikely the vast majority of forestry operations can be inspected by MNR within six months of logging. Similarly, at three sites, (Sherratt #4, Scriven #1 and #2), MNR was not able to set penalties or charges under the *CFSA* because the two-year limitation period had expired.

This MNR investigation team recommended very firmly that all relevant forestry guidelines should be clarified and strengthened to maintain the ecological function of small streams and wet areas. These (often unmapped) streams provide important nursery habitat for fish, and their water quality and temperature affects downstream areas. At two sites (Scriven site #3, Sherratt Site #2), the MNR investigation team found that stream sides had been disturbed by tree harvesting, debris piles and heavy machinery. But the team did not recommend enforcement, because they found the application of MNR guidelines to be ambiguous and confusing, especially with regard to small unmapped streams. This raises the larger questions of why these confusing guidelines have not been noticed earlier, and whether MNR staff get much opportunity to test the compliance guidelines in actual enforcement situations. These investigations also demonstrate the challenges faced by MNR compliance staff when they try to apply MNR's compliance philosophy to real situations. MNR's compliance approach is to make penalties reflect environmental impacts as well as the characteristics of the offender. Compliance staff must not only verify that a rule was broken (e.g., trees were cut to the stream edge), but must also evaluate what the environmental damage was in each instance; for example, did the water temperature increase, was erosion significant, etc. MNR's compliance approach assumes that inspection staff have extensive experience and expertise with very local forest conditions and with recent forestry practices of the licensee - assumptions that may be hard to meet, given reduced resources. Even this highly skilled investigation team found it difficult to evaluate the degree of environmental damage, since they couldn't compare "before" and "after" situations. This compliance approach may also contribute to confusion among forest operators, who may infer that it is sometimes acceptable to cut trees to the edge of streams, pile debris on top of streams, or run heavy machinery into streams.

I98015

Alleged *OWRA* contravention through forestry activities in the Algoma Forest Management Unit (MOE)

Investigation Denied — July 1998

The applicants allege that forest operations were carried out in Sherratt Township in contravention of the *Ontario Water Resources Act (OWRA)*. The applicants provide evidence that organic debris, soil and silt have been deposited in sensitive headwater watercourses of the Batchawana River as a result of timber harvesting and road constuction. They also allege that skid trails have been constructed in close proximity to sensitive headwater watercourses, and in one instance through a no-cut buffer, within protected Areas of Concern.

Ministry Response
MOE denied the application, noting that because the deposition of debris occured almost a year ago, the ministry was unable to obtain good evidence. MOE also noted that the material provided with the application was not a sufficient basis itself on which to proceed with charges under the *OWRA*.

I98017

Alleged *OWRA* contravention through forestry activities in the Algoma Forest Management Unit (MOE)

Investigation Denied — July 1998

The applicants allege that forest operations were carried out in Scriven Township in contravention of the *OWRA*. The applicants allege that a small watercourse has been filled with logging slash, and another watercourse was left without a 3m riparian reserve.

Ministry Response
MOE denied the application because MNR has conducted an investigation of the environmental impact of logging slash on the resident fishery. MOE also notes that because the deposition of debris occurred almost a year ago, the ministry was unable to obtain good evidence.

I98019

Alleged *OWRA* and *EPA* contraventions through forestry activities in the Algoma Forest Management Unit (MOE)

Application Denied — July 1998

The applicants allege that forest operations were carried out in Schembri Township in contravention of the *OWRA*. The applicants provide evidence that organic debris, soil and silt have been deposited in a sensitive watercourse as a result of timber harvesting and road constuction. They also allege that skid trails have been constructed in close proximity to sensitive watercourses and, in one instance, through a watercourse. The applicants also state that materials from forest activities have been left behind on tertiary roads, possibly in contravention of the *EPA*.

Ministry Response
MOE denied the application, noting that because the deposition of debris occured almost a year ago, the ministry could not collect evidence to prove an adverse effect under the *OWRA*. With respect to the alleged *EPA* violations, MOE notes that the deposition of a small quantity of waste on tertiary logging roads does not warrant a response from MOE, and that such issues are better dealt with by MNR which authorizes such roads.

ECO Findings/Comments for I98015, I98017 and I98019
MOE had valid reasons for deciding not to investigate these three applications. MOE concluded that most of the issues related to MNR responsibilities. MOE knew that MNR was undertaking these investigations. MOE decided reasonably that it would not be possible to collect evidence about sediment impacting on stream water quality a year or more after the event had occurred.

I98021

Alleged violation of the *Game and Fish Act* (*GFA*) through destruction of common tern nests (MNR)

Investigation Completed — November 1998

The applicants are concerned about the suspected destruction of several active common terns nests as a result of grading of lands on the Leslie Street Spit. The Leslie Street Spit is a 260 ha man-made penninsula, extending 5 km into Lake Ontario, east of downtown Toronto. The Spit is composed of fill and rubble from urban construction sites but natural regeneration continues to occur, hosting numerous plant, animal and bird species.

The applicants note that the Canadian Wildlife Service issued a permit to the Toronto Harbour Commission approving the grading work. The applicants note that destruction of tern nests violates s. 60(2) of the *Game and Fish Act*, which prohibits the taking, destruction or possession of the eggs or nests of any game bird, except where approved by the minister for educational or scientific purposes. The applicants also allege contraventions of Sections 20(2) and 36 of the *Game and Fish Act*, which prohibit the worrying or molesting of birds.

Ministry Response
MNR's investigation determined that the grading activity on the Leslie Street Spit did not contravene the *GFA*. Section 20(2) prohibits the use of vehicles for the purpose of hunting (including chasing, pursuing, worrying, molesting, killing, injuring or destroying any animal or bird), but MNR found no evidence of this activity. The bulldozer was performing structural stability work on the Spit for safety reasons, not for the purpose of harming or killing the birds.

- Section 36 prohibits hunting or trapping animals or birds without a licence. MNR determined that the intent of the grading activity was not hunting and so no licence was required under the *GFA*.
- Section 60(2) of the *GFA* says that no person shall take, destroy or posses the eggs or nests of game birds without the written authority of the minister. MNR states that, in this case, the constitutional law is unclear with respect to the *GFA* and the related federal *Migratory Birds Convention Act*. MNR directs concerns about Migratory Birds Regulations to Environment Canada but did investigate the applicants' allegations that approximately 60 nests were destroyed by site grading. It found no proof of this allegation and noted that the concentrated nesting areas remained untouched.

MNR recognizes that there is room to improve the scheduling of future work, and staff are available to participate and assist in developing a revised work plan.

ECO Findings/Comments
MNR did conduct an investigation into the alleged contraventions, but more information in the response would have helped to support its findings.

MNR's decision hinges, in part, on a difference of interpretation of several provisions of the *Game and Fish Act* (GFA) between MNR and the applicants. MNR asserts that the purpose and intent of the grading work on the Leslie Street Spit was not hunting, and therefore sections 20(2) and 36 of the *GFA* were not contravened. With respect to the destruction of game bird eggs (section 60(2) of the *GFA*), MNR defers to Environment Canada, but notes that its investigation showed no proof that 60 tern nests were destroyed.

MNR reports that the applicants and the Toronto Harbour Commission (THC) have met and that the THC has agreed to alter work schedules to address the issue of protecting nesting terns. MNR has offered to assist in developing a revised work plan in this regard. MNR also recommends that the THC consider providing signage on the Spit to explain the work.

It would have been helpful for MNR to provide in its response more detail on how its investigation reached the conclusion that 60 tern nests were not destroyed (e.g., when MNR undertook this investigation and how).

I98022

Alleged contravention of s. 35(1) and 36(3) of the federal *Fisheries Act* from ongoing discharges from a mine site (MNR)

Investigation Denied — August 1998

The applicants are concerned about discharges from a non-operational graphite mine on Graphite Lake, located in the headwaters of the Magnetawan River. They claim that environmental harm, including declines in fish populations, have occurred as a result of mine operations, citing a 1996 MNR report as evidence. The applicants feel that a remedial order and possible prosecution are needed to protect this ecosystem and the ecosystems downstream.

Related Application: I98023

Ministry Response
MNR denied the application, noting that the Graphite Lake Mine site has undergone extensive review over the past several years by several ministries. Specifically, the Ministries of Natural Resources, Northern Development and Mines, and Environment, as well as the Federal Department of Environment, have been working together to develop a closure plan for the site. In its rationale, MNR also references a field order issued by MOE against the mining company (the order was issued on July 14, 1998, five days prior to the application for investigation being filed). The field order requires the mining company to take immediate action on implementing an abatement plan to address the acid mine drainage. MNR also notes that long-range remedial plans are also being developed.

ECO Findings/Comments
The ministry was justified in denying the application. By doing so it avoided duplicating an ongoing investigation. However, MNR should have provided the applicants with a more thorough explanation of how the actions being taken by the various ministries will address the applicants' specific concerns regarding *Fisheries Act* violations.

I98023

Alleged contravention of the *Ontario Water Resources Act* and the *EPA* from ongoing discharges from a mine site (MOE)

Investigation Denied — August 1998

The applicants are concerned about discharges from a non-operational graphite mine on Graphite Lake, located in the headwaters of the Magnetawan River. They claim that environmental harm, including declines in fish populations, has occurred as a result of mine operations, citing a 1996 MNR report as evidence. The applicants feel that a remedial order and possible prosecution are needed to protect this ecosystem and the ecosystems downstream.

Related Application: I98022

Ministry Response
MOE denied the application, citing that it is aware of contaminant discharges and water quality problems at the site and is taking steps under its compliance policy. The ministry noted that it has been consulting over the past several years with other agencies (MNDM, MNR, Environment Canada) regarding the alleged environmental contamination. Specifically, MOE issued a field order against the company on July 14, 1998 to address immediate problems (the field order was issued five days prior to the application for investigation being filed). MOE has indicated that additional abatement measures will be applied as appropriate and as expeditiously as possible if the company fails to comply. Notices of proposals will be posted on the *EBR* Registry as required under the *EBR* with respect to future classified instruments. MOE expects that the applicants' concerns will be resolved by the company. If the company fails to address the concerns, MOE will continue to work expeditiously with appropriate provincial and federal agencies to take necessary abatement actions to safeguard the environment.

ECO Findings/Comments
The ministry was justified in denying the application. By doing so it avoided duplicating an ongoing investigation. However, MOE should have stated its reason for the denial more clearly, so the applicants would know on what legal basis the ministry made the decision not to investigate. This application has highlighted the need for action and vigilance by MOE and other government agencies on this longstanding problem

I98024

Alleged contravention of the EPA, Reg. 347, and a C of A issued to Three County Recycling and Composting Inc. (MOE)

Investigation Denied — October 1998

Neighbours of the Three County Recycling and Composting facility in Aylmer, Ontario, allege that TCR is contravening conditions of its Certificate of Approval. They allege that the facility emits odours, pieces of plastic and other garbage, air pollution causing adverse health effects, and water contamination. The applicants included a substantial amount of evidence with their application.

Related Application: R98010

Ministry Response

MOE decided it would not conduct an investigation under the *EBR* because all of the issues raised in the application have previously been or are currently being investigated.

The ministry was already investigating the company before the application was received, and later issued a field order to bring the site into compliance with its C of A with respect to odours and blowing plastic.

The ministry says it will continue its investigation of the company and said it is prepared to take further legal action should the company not comply with the Field Order or any part of the *EPA* or its general regulation.

ECO Findings/Comments

The ministry was justified in denying the application, as the *EBR* does not require a ministry to duplicate an ongoing investigation. It appears that some of the applicants' concerns have been addressed by MOE's actions.

APPENDIX G
Glossary of Terms

acid rain The deposition of airborne acids by rain or snow great distances from where these substances are discharged into the atmosphere by the burning of fossil fuels. Acid rain adversely affects aquatic and terrestrial environments.

Act A law passed by the Ontario Legislature.

aggregate Materials extracted from the ground including gravel, sand, clay, earth, shale, stone and rock, generally used in construction activities.

alternative service delivery The delegation or sharing of responsibilities for delivering services, developing policies, or regulating industries which were previously governmental responsibilities. Can include many different kinds of partnership or power-sharing arrangements between governments, corporations, voluntary or industry organizations, and individuals.

ambient air Outdoor air. Air not enclosed within a building, chimney or other structure and of sufficient distance from any source of air pollution emissions so that it represents the average level of air quality within a given area. See also **ambient air quality criteria**.

ambient air quality criteria (AAQC) For many pollutants, Ontario has established ambient air quality criteria. They are generally set at the level where no adverse effect is observed on people or the environment. AAQCs are used as guides and are not enforceable.

appeal body A tribunal to which an appeal or application for **leave to appeal** under the *EBR* is referred. For example, appeals brought under many statutes administered by the Ministry of the Environment are heard by the Environmental Appeal Board.

application for investigation An *EBR* process that allows two Ontario residents to apply together to ask a minister to investigate if they think someone is violating an environmentally significant Act, regulation or instrument.

application for review An *EBR* process that allows two Ontario residents to apply together to ask a minister to review existing Acts, regulations, instruments or policies if they think the environment is not being protected or to establish new Acts, regulations or policies to protect the environment.

approval exemption regulation (AER) A regulation that exempts individuals or companies from the need to obtain approvals, such as **certificates of approval** or **permits to take water**, for certain designated activities which are predictable, controllable and have minimal environmental impacts. See also **standardized approval regulation**.

aquifer An underground water-bearing layer of rock or sand that has enough water to serve as a source of **groundwater**.

Better, Stronger, Clearer (BSC) A report released by the Ministry of the Environment in November 1997 as part of its Regulatory Review project that outlines many proposed changes to MOE regulations. See also **Responsive Environmental Protection, MOE Regulatory Review Project**.

biomass energy Biomass is created when plants capture solar energy and convert it into chemical energy in the form of plant structures (leaves, stalks, stems, roots, seeds, etc.). In turn, this biomass can be utilized to release its chemical energy in a variety of ways, including burning and decomposition.

biomedical waste Waste generated from health care and other facilities such as hospitals, medical research labs, veterinary clinics, medical offices, funeral homes and nursing homes. Materials include instruments (scalpels, syringes), blood and blood contaminated materials, pharmaceuticals, human body parts and animal carcasses.

black liquor Effluent from the manufacturing of pulp and paper that contains lignin and liquids from the cooking process where chemicals are used to separate out fibers that form pulp.

boreal forest A vegetation zone that stretches across much of Northern Ontario, typified by cold-tolerant coniferous trees such as spruce, fir, and pine and hardy deciduous trees like poplar and birch. The region is also characterized by numerous lakes, extensive peatlands and poor soils.

bump-up, bump-up request Where an **undertaking** is subject to a **class environmental assessment** under the *EAA*, a person may request that the Minister of the Environment "bump up" the undertaking to a full **environmental assessment**.

carbon dioxide (CO_2) A gas that naturally occurs in the atmosphere at very low levels but whose concentration is gradually increasing due to the burning of fossil fuels. CO_2 is an important **greenhouse gas**.

carbon monoxide (CO) A tasteless, odourless and colourless gas that is naturally occurring at low levels but increases greatly in urban areas due to motor vehicle emissions. At high enough levels, it is toxic when inhaled because it blocks oxygen from entering the bloodstream.

certificate of approval (C of A) A permit issued by a ministry under a specific provision in an Act or regulation that allows the permit holder legally to discharge a limit-

ed volume of polluting substances or carry out an activity that may have an adverse affect on the environment, according to the terms and conditions set out in the permit.

class environmental assessment A class environmental assessment describes an environment assessment procedure which applies to **undertakings** that are part of a group of similar undertakings (for example, highway construction projects or forest management planning processes). The procedures are less extensive than for individual (or full) **environmental assessments**, although a request to **"bump-up"** to an individual assessment may be made.

Conservation Authority A public agency established under the *Conservation Authorities Act* to further the conservation, restoration, development and management of natural resources such as rivers, streams and public lands, within an area over which the authority is granted jurisdiction.

conservation easement see **easement**.

credit trading A program whereby companies can earn credits for reducing emissions below regulatory or voluntary standards and exchange these credits with either a regulatory agency or other companies for some benefit depending upon the structure of the program.

cogeneration The simultaneous production of electricity and useful heat or the capture of wasted heat produced in the generation of electricity.

Crown land Land in Ontario that is public land under the jurisdiction of the provincial government, including land under water.

cumulative environmental impact The sum of the environmental impacts from an activity or a range of activities on a particular **ecosystem** over time.

decision The use of discretion by the minister or delegated staff of a prescribed Ontario government ministry in relation to an environmentally significant proposal.

declaration order See **exemption order**.

deposit-refund A monetary deposit collected from consumers at the time of purchase of a product and refunded to them when they return the good or packaging to the appropriate location.

dioxin Common term for 2,3,7,8-tetrachlorodibenzo-para-dioxin, thought to be the most toxic of 75 different dioxins. Identified as a carcinogen in animal tests. Dioxin is produced in very small amounts as a by-product of several industrial processes and is sometimes released when plastics are burned in an uncontrolled manner.

Director Under the *Environmental Protection Act*, the Minister of the Environment may appoint employees to act as directors empowered to exercise a range of powers such as issuing a cleanup order.

easement The term easement is used loosely to refer to "conservation easements" which restrict a person's ability to do something on his or her land. For example, a landowner may agree to refrain from cutting down an environmentally significant woodlot. Conservation easements are legally known as "restrictive covenants." In legal terms, the term easement, when used on its own, refers specifically to a permissive agreement that allows someone else to do something on someone's land. For example, a right of way over private property is often put in place to facilitate the use of trails by the public.

ecological system or ecosystem A community of interdependent plants and animals together with the environment that they inhabit and with which they interact.

effluent Discharge of pollution into a waterway.

emission Discharge of pollution into the air.

energy-from-waste Creating electrical power by burning garbage or other materials such as woodwaste.

environment Under the *EBR*, the term environment is defined as the air, land, water, plant life, animal life and ecological systems of Ontario.

environmental assessment (EA) An analysis, report, or body of evidence, relating to a specific project or development, that includes a description of the expected environmental impacts of a project, actions that could prevent or mitigate these environmental impacts, and alternative methods to carrying out the project. The term "environmental assessment" has a specific meaning in legislation, such as the *Environmental Assessment Act (EAA)*.

Environmental Bill of Rights, 1993 (EBR) A statute of Ontario, S.O. 1993, c. 28, that came into effect in Ontario in February 1994 which recognizes that the Ontario government has the primary responsibility for protecting, conserving and restoring the natural environment, but also recognizes that the people of Ontario have the right to participate in government decision-making and to hold the government accountable for those decisions. The *EBR* provides a number of new ways for the residents of Ontario to participate in environmental decision-making.

Environmental Registry An electronic database that may be accessed via the Internet. The Registry was established by the *EBR* to provide information about the environment to the public, including: the text of the *EBR*; general *EBR* information; the ministries' Statements of Environmental Values; summaries of proposed Acts, regulations, policies and instruments; notices of Appeals of instruments and Appeal decisions; notices of court actions and final results; and application forms for Reviews and Investigations.

environmentally significant Factors to be considered in determining environmental significance include the measures required to prevent environmental harm, the geographic extent of environmental harm, and the public and private interests involved. Environmental significance is determined by looking at the potential effects of a proposal on the sustainable use of resources, the protection and conservation of biodiversity, pollution prevention and healthy communities. These are the types of gov-

ernment decisions that are subject to the public participation requirements of the *EBR*.

Environmentally Significant Areas (ESAs) Natural areas that have a significant natural resource value and/or important ecological function and are also susceptible to disturbance by human activities. Under the **Class Environmental Assessment** for Management Board Secretariat/Ontario Realty Corporation activities, ESAs include: class 1,2, & 3 wetlands, Areas of Natural and Scientific Interest, ESAs identified by municipalities and **conservation authorities**, certain land designations under the Niagara Escarpment Plan, habitats of threatened, rare and endangered species, and groundwater recharge sites.

environmental study report The document required under the Class Environmental Assessment for Management Board Secretariat/Ontario Realty Corporation Activities that documents a project carried out under Category C of the class EA, explains the planning and decision-making process that has been followed, and sets out the mitigation measures proposed to offset environmental impacts.

exemption order The Minister of the Environment may issue these orders under the *EAA* which allow an **undertaking** or class of undertakings to proceed without an **environmental assessment**. Under changes made to the *EAA* by Bill 76, which came into force in 1997, these orders will now be known as **declaration orders**.

extended product responsibility The principle that all actors along the product chain, including manufacturers, distributors, and consumers, share responsibility for the life-cycle environmental impacts of a product, including upstream impacts inherent in the selection of materials for the products, impacts from the manufacturer's production process itself, and downstream impacts from the use and disposal of the products.

external costs Negative results of an activity (for example, environmental and health impacts) that are not directly paid for by the party undertaking the activity.

feebate Financial incentive used to promote environmentally friendly behaviour, most commonly for the purchase of fuel efficient vehicles by providing a rebate or by taxing inefficient vehicles.

flue gas Waste gas that results from combustion processes such as incineration and is released into the atmosphere through a chimney or stack.

full-cost pricing A method of pricing products or services that includes market costs (i.e., labour and equipment) as well as non-market costs (i.e., environmental impacts, health impacts and government subsidies).

furan Common term for the specific compound 2,3,7,8-tetrachlorodibenzofuran, and also used to refer to chlorinated dibenzofurans in general, a group of chemicals. Furans are produced in very small amounts as a by-product of several industrial processes and are believed to be a potential carcinogen.

gap analysis The methodology used to identify natural landform and vegetation features that are unrepresented or under-represented within a natural heritage areas system and to identify the best representative areas that together contain the full array of features within a region.

geothermal energy Naturally occurring internal heat from within the earth's crust. May be harnessed for the purpose of transforming it into usable forms of energy, usually electrical or space heating.

Gigajoule See Joule.

green industry A company that provides goods or services that are used to protect or remediate the environment, or a company that has made alterations to reduce environmental damage caused by its operations.

greenhouse gases (GHGs) Gases in the atmosphere that let sunlight through to the earth's surface while trapping heat energy that is radiated back from the surface, resulting in a warming of the planet. Without naturally occurring greenhouse gases, the earth would be 33 degrees Celsius colder, on average. However, human activity has resulted in increased quantities of gases, both natural and fabricated, being released into the atmosphere, leading many to believe that the earth's temperature is gradually increasing. GHGs include **carbon dioxide, nitrogen oxides**, methane, water vapour, chlorofluorocarbons and **ozone**.

groundwater Water that exists beneath the earth's surface, flows through geological formations such as sand layers, porous rock layers or fractured rock layers, and feeds wells.

harm to a public resource action The right under the *EBR* to sue an individual or company which is violating, or is about to violate, a environmental Act, regulation or instrument and is harming, or will harm, a **public resource**.

hazardous waste Waste that is harmful to health or to the environment because of its physical characteristics, quantity or concentration; can be toxic, corrosive, ignitable, reactive or infectious.

heavy metals Metals that persist in the environment for long periods of time and have toxic properties, including lead, mercury, cadmium and arsenic.

household hazardous waste Household hazardous waste is **hazardous waste** generated from products that are used in homes or for personal consumption, including batteries, paint, solvents, pesticides, oil and bleach.

inhalable particulates Microscopic airborne particles which are a component of **smog** and small enough to be inhaled.

instrument Any document of legal effect issued under an Act, including a permit, licence, approval, authorization, direction or order, which must be issued before companies or individuals can carry out activities that will have a significant effect on the environment.

instrument classification The requirement in the *EBR*

that certain ministries prepare a regulation to classify proposals for instruments as Class I, II or III proposals according to their level of environmental significance, public notice and participation requirements, and the potential for public hearings to be held.

instrument holder The individual or business that has an instrument issued to it.

Joule A small unit of energy. 1 **Gigajoule** of energy (1 billion Joules) is approximately equivalent to the fuel an average car would consume to travel 100 kilometres.

Kyoto Protocol An international agreement signed by 159 countries in Kyoto, Japan, in 1997, concerning the control of **greenhouse gases**. The industrial nations agreed to reduce the emission of greenhouse gases by 5.2% from 1990 levels to be achieved by 2008 to 2012.

land use planning Includes identifying problems, defining objectives, collecting information, analysing alternatives, and determining a course of action for the uses of land within a geographical area.

Lands for Life (LFL) A new planning process for **Crown land** and natural resources announced by MNR in early 1997. The Lands for Life planning area covers 46 million hectares across central and northern Ontario, and is divided into three regions. See **Regional Land Use Strategies**.

leachate Liquid that percolates through landfill waste, picking up contaminants in the process. If not contained, leachate may infiltrate and contaminate surrounding **groundwater** or surface water.

Leave to Appeal The process under the *EBR* of requesting permission from an appeal body to appeal a ministry decision to grant an **instrument**.

lignin An organic compound found in the cell walls of many plants making them rigid and woody.

mandatory take-back A system requiring retailers or manufacturers to accept responsibility for packaging or used goods returned to them.

memorandum of understanding (MOU) A document setting out the terms of a relationship between two or more organizations. MOE has entered into several Memoranda of Understanding establishing joint pollution prevention projects with industry organizations. The MOUs to which MOE is a party are voluntary agreements, not legally binding contracts.

microbial action The activity of micro-organisms, such as bacteria, viruses, and protozoa.

MOE Regulatory Review Project MOE's review of its environmental regulations, commenced in October 1995. Two discussion papers have been published outlining the review. For information on those papers, see **Responsive Environmental Protection** and **Better, Stronger, Clearer**.

nitrogen oxides (NO_X) Air pollutants that contribute to smog, acid rain and global warming. Nitrogen oxides occur naturally in the environment but are also generated by the combustion of fuels.

old growth Old growth forests are ecosystems characterized by the presence of old trees with their associated plants, animals, and ecological processes. They show little or no evidence of human disturbance.

organic compounds Complex substances that contain carbon. Organic compounds are the building blocks of life.

ozone A molecule composed of three atoms of oxygen that serves an important role in the earth's upper atmosphere by insulating the planet from excessive ultraviolet radiation. However, ground-level ozone, produced largely through combustion in automobiles, is a component of **smog** and is harmful to human health and the environment.

particulate matter Particles of solid matter or liquid that remain suspended in the air. Includes dust and smaller, non visible particles (see also **PM10** and **inhalable particulates**).

permit to take water (PTTW) A permit required under the *Ontario Water Resources Act* for most activities that draw more than 50,000 litres of water per day from the environment (includes surface water and **groundwater**).

PM10 Small **inhalable particulates** under 10 micrometres in diameter. They can penetrate lungs more deeply than larger particulates, affecting sensitive groups like children and people who experience respiratory difficulties.

point of impingement standards Theoretical concentration of a pollutant at the place where it contacts the ground or a building after being discharged into the air from a smokestack. Emissions limits included in **certificates of approval** are based on point of impingement standards rather than top-of-the-stack (or point of emission) standards.

policy Under the *EBR*, a policy is a program, plan or objective and includes guidelines or criteria to be used in making decisions about the issuance, amendment or revocation of instruments.

polychlorinated biphenyls (PCBs) A class of synthetic organic compounds which are toxic and very persistent in the environment. PCBs accumulate in living organisms over their lifetimes.

prescribed (ministries, Acts, regulations or instruments) The various ministries, Acts, regulations or instruments that are specified in the regulations made under the *EBR* and to which the provisions of the *EBR* apply.

product stewardship The obligation of producers and consumers to assume responsibility for the wastes generated in the manufacture and distribution of products and for the products themselves once they have reached the end of their useful life.

program approvals An interim approval granted by MOE to a company to operate and emit pollutants at levels greater than regulated limits on the basis that the polluter is in the process of implementing a pollution con-

trol plan that will eventually lead the company to come into compliance with the regulated limits. While in full compliance with the program approval, the polluter cannot be prosecuted for breaching the regulated limits.

public nuisance action A law suit that alleges that a person or corporation has caused an unreasonable and widespread interference with the use and enjoyment of a public right, including environmental resources. Prior to the passage of the *EBR*, the right of an Ontario resident to initiate a public nuisance action was limited. The *EBR* now permits anyone who experiences direct economic or personal loss because of a public nuisance causing environmental harm to sue for damages or other personal remedies.

public resource Under the *EBR*, a public resource is defined as outdoor air, public water, unimproved public land or public land used for recreation, conservation, resource extraction or management, and any plant or animal life or ecological systems associated with air, public water, or public land.

R-2000 A set of design specifications for very energy-efficient homes.

Regional Land Use Strategy (RLUS) Phase 1 of the MNR's new land-use planning process, **Lands for Life**, will result in three RLUSs. Each RLUS will include: broad objectives for natural resources; land use designations for general use, forest management, parks and protected areas, and **resource-based tourism**; and strategies for other issues such as fishing and hunting. The RLUSs will also provide direction for more detailed land-use and resource management planning in Phase 2, Sub-Regional Land Use Planning.

regulation A form of law, rule or order of a legislative nature specifically authorized under a provision of a statute and approved by cabinet. Has the force of law when in effect.

renewable energy portfolio standard Legal requirement for electricity producers to provide that a certain portion of their energy comes from renewable energy sources such as wind and solar power.

resource-based tourism A sector of the tourism industry which provides clients with opportunities to experience nature in a remote setting.

Responsive Environmental Protection (REP) A document released in July 1996 by the MOE as an early step in its **Regulatory Review Project**. The ministry proposed an overhaul of many of Ontario's environmental regulations and requested comments through the Environmental Registry. In November 1997 the Ministry of the Environment issued a follow-up report **(Better, Stronger, Clearer)** which includes an outline of planned changes to the regulatory system. See also **MOE Regulatory Review Project**.

scrubber ash Waste collected from emissions by an air pollution device that uses a spray of water or reactant, or a dry process to trap pollutants before they are discharged into the air.

smog Low-lying urban air containing noxious gases and suspended particles from motor vehicles, industry, and other sources that is harmful to human health and the environment in addition to reducing visibility, especially during the summer months.

standardized approval regulation (SAR) A regulation passed under the *EPA* or the *OWRA* that provides an automatic approval for certain designated activities which are predictable, controllable and have minimal environmental impacts and that meet pre-determined conditions. The proponent is not obligated to obtain an individual approval, such as a **certificate of approval** or a **permit to take water**, but must still notify MOE of the activity and demonstrate that the activity meets the conditions set out in the regulations.

Statement of Environmental Values (SEV) A ministry statement, required by the *EBR*, that explains how the purposes of the *EBR* are to be applied when environmentally significant decisions are made in the ministry and how consideration of the purposes of the *EBR* should be integrated with other considerations, including social, economic and scientific considerations, that are part of decision-making in the ministry.

statute See **Act**.

sulphur dioxide (SO_2) An air pollutant that contributes to acid rain and smog. Sulphur dioxide occurs naturally in the environment but is also generated by the combustion of fuels and many industrial processes.

sustainability The concept that economic development must take full account of the environmental consequences of economic activity.

toxicology The science of the effects of toxic substances on organisms and the environment. Toxic substances ("toxics") have deleterious health effects on living things, even at low doses.

three Rs - reduce, reuse, recycle (3Rs) Actions that can be taken by users of products, with respect to the packaging of the product or the product itself once use is completed, as means of diverting waste from landfill or other disposal options. Often the 3Rs are referred to as a "hierarchy" because reduction is more effective than reuse, and reuse is more effective than recycling, in terms of minimizing the use of resources and the creation of waste requiring disposal.

undertaking An enterprise, activity, or proposal, plan or program. Environmentally significant undertakings of the Ontario government, municipal governments, and some private persons (designated by regulation) are subject to requirements of the *EAA*.

user charges Direct fees charged by governments to members of the public who choose to use a service or to those who use the service most often.

volatile organic compounds (VOCs) Organic compounds which evaporate easily. They reach the atmosphere through many processes, including combustion in automobiles and the evaporation of solvents, paint, fuels, and dry-cleaning fluids. VOCs are a component of smog.

watershed An area of land where all water drains toward a common point, usually defined by a river and its tributaries.

watershed management The management of water resources on the basis of watershed boundaries rather than municipal or other jurisdictional boundaries.

Abbreviations and Acronyms

Terms and Titles

AER	Approval Exemption Regulation
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers
BSC	Better, Stronger, Clearer
CCME	Canadian Council of Ministers of the Environment
CIELAP	Canadian Institute for Environmental Law and Policy
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CSA	Canadian Standards Association
C of A	Certificate of Approval
DLUG	District Land Use Guidelines
EA	Environmental Assessment
EAB	Environmental Assessment Board
ECO	Environmental Commissioner of Ontario
EPP	Enhanced Public Participation
ESA	Environmentally Significant Area
FCCC	Framework Convention on Climate Change
GHGs	Greenhouse Gases
GTA	Greater Toronto Area
GTSB	Greater Toronto Services Board
IPCC	International Panel on Climate Change
LFL	Lands for Life
MCzCR	Ministry of Citizenship, Culture, and Recreation
MCCR	Ministry of Consumer and Commercial Relations
MDC	Market Design Committee
MEST	Ministry of Energy, Science and Technology
MISA	Municipal-Industrial Strategy for Abatement
MOE	Ministry of the Environment
MOH	Ministry of Health
MOL	Ministry of Labour
MOU	Memorandum of Understanding
MBS	Management Board Secretariat
MMAH	Ministry of Municipal Affairs and Housing
MNDM	Ministry of Northern Development and Mines
MNR	Ministry of Natural Resources
MTO	Ministry of Transportation of Ontario
NAPCC	National Action Plan on Climate Change
NO_x	Nitrogen Oxides
OHSC	Ontario Hydro Services Company
OMAFRA	Ontario Ministry of Agriculture, Food and Rural Affairs
OMB	Ontario Municipal Board
OPGI	Ontario Power Generation Incorporated
ORC	Ontario Realty Corporation
OWMC	Ontario Waste Management Corporation
OWDB	Ontario Waste Diversion Board
PERT	Pilot Emissions Reduction Trading
PCBs	Polychlorinated Biphenyls
PTTW	Permit To Take Water
REP	Responsive Environmental Protection
RLUS	Regional Land Use Strategies
SAR	Standardized Approval Regulation
SEV	Statement of Environmental Values
SO_2	Sulphur Dioxide
TDM	Transportation Demand Management
TSSA	Technical Standards and Safety Authority

Legislation

CFSA	*Crown Forest Sustainability Act*
EAA	*Environmental Assessment Act*
EBR	*Environmental Bill of Rights, 1993*
ECA	*Energy Competition Act*
EEA	*Energy Efficiency Act*
EPA	*Environmental Protection Act*
FIPPA	*Freedom of Information and Protection of Privacy Act*
FWCA	*Fish and Wildlife Conservation Act*
GTSBA	*Greater Toronto Services Board Act*
NEPDA	*Niagara Escarpment Planning and Development Act*
BCA	*Building Code Act*
OWRA	*Ontario Water Resources Act*
PLA	*Public Lands Act*

Seated, left to right: Cynthia Robinson, David McRobert, Modesta Galvez, Liz Guccione, Peter Lapp, Elaine Hardy. Standing, left to right: Ellen Schwartzel, Robert Blaquiere, Mark Murphy, Joel Kurtz, Rohan Gaghadar, Paul McCulloch, Bev Dottin, Trevor Fleck, Ann Cox, John Ferguson, Lisa Shultz, Darla Cameron. Not pictured: Karen Beattie, Antonella Brizzi, Maureen Carter-Whitney, Manik Duggar, Averil Guiste, Nina Lester, Damian Rogers.

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